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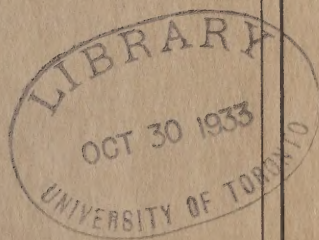
Canada. Commercial Intelligence Service

# THE CANADIAN INDUSTRIAL FIELD

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A Compilation for the Guidance of Industrialists  
Considering Expansion in  
Canada

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OTTAWA  
J. O. PATENAUDE  
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY  
1933

*Price, 50 cents.*





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DEPARTMENT OF TRADE AND COMMERCE  
OTTAWA, CANADA

The HON. H. H. STEVENS  
*Minister*

J. G. PARMELEE  
*Deputy Minister*

COMMERCIAL INTELLIGENCE SERVICE  
L. D. WILGRESS, *Director*

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SECOND AND REVISED EDITION  
1933

THIS publication has been compiled under the direction of Mr. Frederic Hudd, Canadian Government Trade Commissioner at New York, by officials of various Departments of the Federal and Provincial Governments.



## FOREWORD

THE growth of Canada during the past decade and the development of the Dominion's trade, has encouraged foreign industrial firms, particularly in the United States, to consider the establishment of Canadian units for the manufacture and distribution of their products, or to take advantage of existing facilities, by having their lines manufactured on a royalty basis under contract, or upon some other agreement basis. The Canadian domestic market continues to expand, while the value of a Canadian factory for the manufacture of products for export to British Empire and other countries with which Canada has preferential trade agreements, is a consideration of growing concern to the foreign industrialist.

The establishment of a Canadian factory should be regarded not merely as a means of defeating tariffs or retaining a domestic trade that is slipping away. Canada is now a field of new world opportunity for the manufacturer and the foreign trader, possessing advantages not available in other countries. These advantages are definite and have stood out sharply in the past few years of stress. Chief among these advantages from the point of view of the manufacturer are: the absence of over-industrialization, stable labour conditions with a fair wage scale, a banking system that has withstood the test of one of the most difficult periods in modern history, and vast reserves of raw materials and natural resources. From the point of view of the exporter there are the advantages of trade agreements giving Canadian goods preferred treatment in British Empire and other countries, Canada's geographical position in relation to world markets, and growing shipping facilities direct from Canadian ports.

Apart from the opportunities for the marketing of goods in a growing domestic field, the arrangements concluded at the Imperial Economic Conference held in Ottawa during 1932 have given Canada a still more preferred position in British Empire markets and open new fields for Canadian products. The extent and character of Canada's preferential tariff arrangements will be found in Chapter 3 of this compilation—"British Empire Tariff Preferences on Canadian Goods," and Chapter 2—"The Manufactures and Trade of Canada"—contains an outline of the extent to which Canadian products are already finding a market in British Empire countries.

In giving preliminary consideration to Canada as a field for the establishment of new industries, it is necessary for the foreign industrialist to familiarize himself with certain general information. In the first place it is desirable to determine whether or not facilities for the initial production of a particular line already exist, as many Canadian manufacturers are equipped to expand their operations and are seeking to make contacts with foreign manufacturers whose

lines they could manufacture on some agreement basis. Where these manufacturing facilities are available, the incidental advantages to the incoming industrialist are obvious.

The foreign manufacturer considering the Canadian field must also be informed regarding the incorporation of companies in Canada, the extent and character of taxation, factors affecting plant location such as the availability of power and raw materials, the market situation, transportation facilities and labour conditions. In considering the export phase it is necessary to be informed regarding Canada's manufactures, the extent of Canadian export trade and in what markets Canada enjoys a preferred tariff position.

While a great deal of excellent material is available, nothing of recent date assembles such data in concise form under one cover. The present publication in its original form justified the objects of its compilers, and this revised edition is issued in the belief that it will prove of still greater usefulness in the future, in the consideration of problems incidental to the establishment of branch factories in Canada.

H. H. STEVENS,  
Minister of Trade and Commerce.



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## CHAPTER I

### INCORPORATION, CONTROL, AND TAXATION OF CANADIAN COMPANIES

THE DATA INCLUDED IN THIS CHAPTER ARE BASED ON LEGISLATION, SCHEDULES, AND PRACTICES AS OF APRIL, 1933

#### CHARTERS OF INCORPORATION

Foreign manufacturers may carry on business through branch establishments in Canada in one of two ways:—

(1) By registration as a foreign corporation, which requires taking out a licence in each province in which business is carried on through a branch establishment of any kind, and

(2) By incorporation as a Canadian company.

Canadian companies may be incorporated either as Dominion companies under the Dominion Companies Act, or as provincial companies under the Companies Acts of one or other of the nine provinces. The Dominion Companies Act and the Acts of the provinces of Ontario, Quebec, Manitoba, New Brunswick, and Prince Edward Island provide for incorporation by letters patent granting a charter, while the Acts of the provinces of Nova Scotia, Saskatchewan, Alberta, and British Columbia provide for incorporation by the registration of a memorandum of association, usually accompanied by articles of association.

#### Dominion Charters

Companies incorporated under the Dominion Companies Act have a status and powers entitling them to carry on business throughout Canada which no provincial legislation can abrogate, but nearly all the provinces require registration.

In order to incorporate a company under the Dominion Companies Act it is necessary that a petition, signed by at least three applicants, be filed with the Secretary of State at Ottawa. This petition must state the purpose of incorporation, the location of the head office, the amount of capital, the number of shares, and the names of the provisional directors. Other information may also be required. The directors are not to be less than three in number and must be holders of stock.

Part I of the Companies Act, under which companies are generally incorporated, does not require that the directors should be either Canadians or British subjects.

Companies may be incorporated under the Dominion laws with, or without, share capital. There are two kinds of companies with share capital.

(1) Those which offer shares for public subscription, in which case a prospectus or statement in lieu of prospectus must be filed before allotment.

(2) Private companies. Public subscription in this case is prohibited and the filing of a prospectus or notice is therefore unnecessary.



No-par-value shares may be issued by a company incorporated by letters patent, subject to certain conditions and restrictions. Provision may also be made for a portion of the capital to be divided into various classes of shares.

In the naming of a company the use of such words as "Royal," "Imperial," "King" and "Queen," is discouraged under both federal and provincial incorporations. Any name liable to conflict with the name of an existing company is banned. The word "Limited" or "Ltd." as part of the company's name must be used.

### Provincial Charters

In all the provinces, except New Brunswick, companies incorporated under the Companies Act or of any other province are required to be licensed or registered before carrying on business in the province. Application should be made to the Provincial Secretary at the capital of the province concerned.

Annual taxes are imposed by every province on companies carrying on business within the province. (See Table, page 5.) These taxes vary in form and amount in the different provinces and in some cases differ according to whether the company is incorporated locally, or under the Dominion Companies Act, or the Companies Act of another province.

The application for a charter will be granted to any number of persons, not less than five, who apply therefor, under British Columbia, Manitoba, Ontario, and Prince Edward Island Acts; and to not less than three in Alberta, New Brunswick, Quebec, Saskatchewan, and the Northwest Territories. The petition for incorporation must include the names of persons selected by the applicants to act as the first or provisional directors; under Dominion, Ontario, New Brunswick, and Prince Edward Island Acts, not less than three are required, no maximum number being fixed. In Alberta, Manitoba, Saskatchewan and the Northwest Territories not less than three or more than nine are specified; in British Columbia and the Yukon the number is established by the memorandum of association; in British Columbia one of the persons must be a resident of Canada; and for the permanent board the same number is required.

The information required and the procedure for incorporation under one or other of the provincial Companies Acts is, in the main, similar to the requirements of the Dominion Companies Act, but varies in detail in the different provinces.

There follows a statement of the fees payable on incorporation or registration of companies and on the licensing of extra-provincial corporations. These fees refer particularly to manufacturing or mercantile corporations. It should be noted that in some provinces there is an annual tax payable on authorized capital employed in that province, for further particulars of which reference should be made to the "Provincial Taxation" table on page 5.

### Fees for Dominion Incorporation

The fees payable on incorporation depend upon the amount of the authorized capital, according to the following scale:—

CAPITAL	FEE
\$50,000 or less.....	\$100.
More than \$50,000 and not more than \$200,000.....	\$100 Plus \$1 for each \$1,000 or fraction in excess of \$50,000.





## Annual Returns to be filed by Manufacturing Companies in Canada

		APPLICATION	WHAT TO INCLUDE	HOW MADE	DATE OF FILING	PLACE OF FILING	FEES
<b>DOMINION</b> Capital—Ottawa.	(1) Annual Summary.	All companies incorporated under Dominion charter.	Particulars as to capital, management, etc., as of 31st March.	In duplicate, verified by prescribed affidavit.	On or before 1st June.	Secretary of State, Ottawa.	When the capital stock of the company is \$200,000 or less—\$5. When the capital stock of the company is more than \$200,000, but not more than \$500,000—\$10. When the capital stock of the company is more than \$500,000, but not more than \$1,000,000—\$25. When the capital stock is more than \$1,000,000—\$25, and \$1 on each \$100,000 in excess of the first million, but not exceeding \$50 in all.
<b>ALBERTA</b> Capital—Edmonton.	(1) Annual Summary. (2) Annual Summary. (3) Corporations Taxation Act.	All companies incorporated by Alberta charter. All extra-provincial companies. All companies carrying on business in Alberta.	Particulars of shareholders, capital, management, etc., of company as of 14th day succeeding first ordinary general meeting (see Form E of Act). Particulars as to incorporation, management, capital, etc., as of 31st December preceding. Information necessary to enable Minister to determine tax.	Signed by manager or secretary of company. Verified by prescribed affidavit. Verified by prescribed affidavit.	Within three weeks of first ordinary general meeting. On or before 1st March. On or before 30th June.	Registrar of Joint Stock Companies. Registrar of Joint Stock Companies. Registrar of Joint Stock Companies.	\$5. For annual return. \$5. For annual return. \$5. For further details apply to Provincial Secretary or Canadian Manufacturers' Association, Toronto.
<b>BRITISH COLUMBIA</b> Capital—Victoria.	(1) Annual Report. (2) Annual Report. (3) Taxation Act and Income Tax Act.	All companies incorporated by British Columbia charter. All extra-provincial corporations. All companies carrying on business in British Columbia.	Particulars as to capital, management, etc., as of day after first general meeting. Particulars as to capital, management, etc., as of 31st December. Net income. Net income for yearly period.	Signed by director, manager, or other officer. Certified by director or other officer. See prescribed form.	Within 15 days of annual general meeting. On or before 1st March. On or before 31st March or within three months of end of business year.	Registrar of Joint Stock Companies. Registrar of Joint Stock Companies. With assessor of assessment district in which chief place of business of company is situated.	\$1. \$1. For further information apply to Provincial Secretary or Canadian Manufacturers' Association, Toronto.
<b>MANITOBA</b> Capital—Winnipeg.	(1) Annual Return. (2) Income Tax Act.	Companies incorporated by Manitoba charter and all extra inter-provincial companies. All companies carrying on business in Manitoba.	Particulars as to capital, management, etc., as of 31st December. Net income for yearly period. Wages of persons employed with names and addresses.	In duplicate, verified by prescribed affidavit. On forms supplied.	On or before 1st March. On or before 30th April.	Provincial Secretary. Municipal Commissioner.	\$2 to \$10 according to authorized capital. 5 per cent of income.
<b>NEW BRUNSWICK</b> Capital—Fredericton.	(1) Annual Summary. (2) Corporations Tax Act.	All companies carrying on business in New Brunswick. All extra-provincial companies carrying on business in New Brunswick.	Particulars as to management, capital, etc. Particulars as to business and capital in province.	Verified by affidavit. Verified by affidavit of manager in province.	On or before 1st June. On or before 1st May.	Provincial Secretary. Provincial Treasurer.	For further details apply to Provincial Secretary or Canadian Manufacturers' Association, Toronto. For further details apply to Provincial Secretary or Canadian Manufacturers' Association, Toronto.
<b>NOVA SCOTIA</b> Capital—Halifax.	(1) Annual Returns. (2) Provincial Revenue (Corporations) Act.	All companies carrying on business in Nova Scotia. All companies with \$25,000 or more paid up capital.	Particulars as to capital, management, etc. Information required as prescribed by Governor in Council.	Verified by prescribed affidavit. Verified by prescribed affidavit.	Month of January. On or before 1st April.	Registrar of Joint Stock Companies, Halifax. Provincial Treasurer.	For further details apply to Provincial Secretary or Canadian Manufacturers' Association, Toronto. For further details apply to Provincial Secretary or Canadian Manufacturers' Association, Toronto.
<b>ONTARIO</b> Capital—Toronto.	(1) Annual Statement. (2) Corporations Tax. (3) Transfer of Shares. (4) Assessment for Municipal Income Tax.	All companies carrying on business in Ontario. All companies carrying on business in Ontario. All companies carrying on business in Ontario. All companies on demand.	Particulars as to incorporation, management, real estate owned, capital stock, etc., as of 31st March. Particulars as to capital, number of offices and net revenue; complete financial statement must be enclosed. Information as to sale, transfer or assignment of shares or debenture stock. (I) Names and addresses of all shareholders resident in the municipality for which assessor is appointed. (II) Stock held by each. (III) Amount of dividends and bonuses paid to each during previous year.	Verified by one affidavit. Verified by prescribed affidavit. Verified by affidavit of officer having knowledge of facts.	On or before 1st May. On or before 1st February. Within 30 days of receipt of demand from assessor.	Provincial Secretary. With Municipal Assessor.	Annual filing fees from \$5 to \$30 according to paid up capital of companies. Companies who pay Corporations Tax are exempt from payment of filing fees. None.
<b>QUEBEC</b> Capital—Quebec.	(1) Quebec Companies Act. (2) Companies Information Act. (3) Corporations. (4) Transfer of Shares.	Companies incorporated by Quebec charter. All companies carrying on business in Quebec or issuing new stock therein. All companies carrying on business in Quebec or issuing new stock therein. All companies carrying on business in Quebec or issuing new stock therein.	Particulars as to incorporation, management, capital stock, etc., as of 30th June preceding. Particulars as to incorporation, management, capital stock, etc., as of 30th June preceding. Information as per Form 61 or 62. Information as to sale, transfer, etc., of shares or bonds (see Form C-1).	In duplicate. In duplicate. In duplicate, verified by prescribed affidavit. Verified by affidavit of president or secretary or chief agent of extra-provincial corporation.	On or before 1st September. On or before 1st September. On or before 1st May. On or before 1st May.	Provincial Secretary. Provincial Secretary. Provincial Treasurer. Provincial Treasurer.	\$10. \$10. For further information apply to Provincial Secretary or Canadian Manufacturers' Association, Toronto. None.
<b>SASKATCHEWAN</b> Capital—Regina.	(1) Annual Summary. (2) Corporations Taxation.	All companies carrying on business in Saskatchewan. All companies carrying on business in Saskatchewan.	Particulars as to capital, management, etc. (see Form D of Act). For Dominion companies merely a certificate that company is in existence and carrying on business in Saskatchewan (Form E of Act). Name, kind of business, etc. Dominion companies are also required to file summary of capital and shares, same as other companies.	Signed by secretary or manager. President, vice-president or secretary may also sign return for Dominion company. Verified by prescribed affidavit.	On or before 1st March, except Dominion companies when date is 1st January. On or before 1st May. Dominion companies file Form "A" 1st January, but summary must be filed 1st March same as other companies.	Registrar of Joint Stock Companies. Registrar of Joint Stock Companies.	\$5 or \$10 according as to whether the authorized capital does not or does exceed \$50,000 for all except Dominion companies where fee is \$5. For further information apply to Provincial Secretary or Canadian Manufacturers' Association, Toronto.

CAPITAL	FEE
More than \$200,000 and not more than \$500,000.....	\$250 Plus \$0.50 for each \$1,000 or fraction in excess of \$200,000.
More than \$500,000.....	\$400 Plus \$0.20 for every additional \$1,000 or fraction in excess of \$500,000.

### Fees for Provincial Incorporation

The fees for the incorporation of provincial companies vary in each of the nine provinces. It is impossible in a work of this size to more than indicate the scales in a general way.

The minimum fees range from \$25 to \$100 and are scaled upwards according to the amount of authorized capital, as in the following table. The minimum and maximum figures shown are those in force in the provinces charging the lowest and highest rates respectively.

CAPITAL	MINIMUM FEE	MAXIMUM FEE
\$25,000	\$ 35.00	\$100
50,000	55.00	110
100,000	77.50	150
250,000	150.50	250
500,000	235.00	375
1,000,000	335.00	500

### Registration of Extra-provincial Companies

Each province has regulations governing the operation within the province of any company not incorporated there. These regulations take the form of registering the company by the filing of its articles of association or charter and by-laws, and also provide that the company must have an attorney or agent resident within the province. In general the fees for registration are the same as for incorporation, reckoned on the amount of capital employed within the province.

### Other Fees

Nominal fees are charged for the filing of all documents, and for registering changes in by-laws, charters, or other records.

### Annual Returns to be Filed by Companies

Under the Dominion Companies Act every incorporated company is required to file annually a return, known as an annual summary, annual report, etc. The return in each case must be filed on or before June 1st in each year and must be accompanied by the prescribed filing fee. In each case an endorsed duplicate is retained by the company for its own use.

In addition to the annual summaries or annual reports referred to, the various provinces require additional annual returns to be made. The table, which follows shows particulars regarding the returns which manufacturing companies are required to file.



## THE CANADIAN INDUSTRIAL FIELD

### COMMERCIAL LAW

#### **The Bankruptcy Act**

The Dominion Bankruptcy Act applies to all persons and corporations having offices or actually transacting business in Canada, except building societies, banks, insurance, trust and loan companies, and railway companies. The Act has established uniformity of legislation throughout Canada as the old assignment acts of the different provinces are practically non-effective.

The Act provides that one or more creditors who are unable to collect accounts amounting to \$500 may apply to the courts to have a debtor adjudged bankrupt. The circumstances of the case are passed upon by a judge appointed to carry out the provisions of the Act. The court may dismiss the petition of the creditor, may stay the proceedings, or may grant a receiving order, as the circumstances warrant. A debtor may voluntarily make an assignment of his assets for the benefit of his creditors.

Authorized trustees, with territorially limited authority, are appointed by the Dominion Government to take charge of, and realize upon, the assets of bankrupts and authorized assignors.

The Act has provisions for ratifying compositions and compelling minority creditors to accept the ruling of the majority.

After being adjudged bankrupt or making an authorized assignment a debtor may apply to the court for an order of discharge. On the hearing of the application the court shall take into consideration the report of the trustee, and may either grant or refuse an absolute order of discharge or suspend the operation of the order for a specified time, or grant an order to discharge, subject to conditions.

#### **The Combines Investigation Act**

The Combines Investigation Act of Canada declares unlawful any combination or monopoly in trade or industry which has operated or is likely to operate to the detriment or against the interest of the public, whether consumers, producers or others. The legislation is based upon a consideration of the welfare of the public as a whole, including not only consumers, but also manufacturers, distributors and labour. The Act is administered by the Department of Labour through an official known as the Registrar of the Combines Investigation Act.

Investigations are made on application by six citizens or on the initiative of the Minister of Labour or the Registrar. Full authority is given to the Registrar, and to commissioners appointed for special inquiries, to examine witnesses on oath and to require the production of books and other records. Prosecution of combines may be instituted by the Attorney General of a province or by the Solicitor General of Canada. It is an offence punishable by fine or imprisonment, to be a party to a combine as defined by the Act, or knowingly to assist in the formation or operation of such a combine. Other similar offences are created by Section 498 of the Criminal Code, under which action can be taken by an Attorney General independently of the machinery set up by the Combines Investigation Act.

Provision is made also for other remedies such as the reduction or removal of customs duties if the Government is satisfied that a combine exists to promote unduly the advantage of manufacturers or dealers at the expense of the public and that such disadvantage is facilitated by the customs tariff. Revocation of a patent may also be effected if a patentee uses his exclusive rights so as to enhance prices unreasonably, or to effect such other restraints of trade as are enumerated in this section.



## Provincial Taxation Affecting Commercial Companies

CLASS OF TAXATION	BRITISH COLUMBIA Capital—Victoria	ALBERTA Capital—Edmonton	SASKATCHEWAN Capital—Regina	MANITOBA Capital—Winnipeg	ONTARIO Capital—Toronto	QUEBEC Capital—Quebec	NEW BRUNSWICK Capital—Fredericton	NOVA SCOTIA Capital—Halifax	PRINCE EDWARD ISLAND Capital—Charlottetown
<b>GENERAL</b>									
<b>1. CORPORATIONS GENERAL.</b>	Companies not paying special taxes are subject to general income tax.	40c. on every \$1,000 of authorized capital on all companies not otherwise taxed (includes grain companies).	All companies not reached by other provisions and not spec. exempt, pay an ann. fee, varying with authorized cap., max. of \$500.	Five per cent of net income on all companies not otherwise taxed (special schedules for banks, street railways, insurance, loan, land, trust, gas and electric and express companies, etc.).	Corporation tax of one-tenth of 1 per cent of capital, \$50 per business stand in Ontario. Municipal business tax based on value of premises occupied.	One-tenth per cent on paid-up capital, \$40 for each place of business in Montreal or Quebec, \$15 elsewhere, reduced one-half when paid-up capital is less than \$25,000; additional tax of 1½ per cent on profits earned in province.	Taxable at rate fixed by Lieutenant Governor in Council at rate not to exceed that on foreign companies.	Annual fee \$19 and up depending on nominal capital; one-tenth per cent on paid capital employed in province.	Companies not paying special taxes are liable on income and personal property basis.
<b>2. GAS AND ELECTRIC CO'S.</b>	(And water works companies) 1 or 2 per cent on gross revenue.	\$500 to \$25 according to population. Gas companies, \$500 in any city, ¼c. per 1,000 cu. feet of natural gas.		Graded tax for each according to population of city operated in: 3,000 pop., \$25; 125,000 pop., \$500; each add. 50,000, \$100.	One-tenth of 1 per cent on paid-up capital, \$50 for each place of business, ½ per cent on net revenue.			One-fifth per cent on paid-up capital, if capital \$50,000 or over, 2 per cent on income; 25c. for each meter.	Electric light companies, 1 per cent of gross revenue.
<b>3. FOREIGN CO'S.</b>	Subject to general income tax on provincial basis.	Same as Corporations General.	Same as Corporation General.	Same as Corporations General.	Same as domestic companies. Capital and revenue allocated to Ontario on per cent sales in Ontario bear to total sales of company.	(Chief office out of Canada not otherwise taxed). One-tenth per cent gross earnings in province. Min. tax of \$30 and \$15.	Extra-provincial corporations, 1 per cent of capital stock invested or used in province. Min. tax \$100, max. tax \$400.		
<b>4. GRAIN CO'S.</b>	Subject to general income tax.	\$50 each elevator and 40c. each \$1,000 authorized capital.	Max. \$500. Fees based on stated capital, number of shares of no par value and where applicable on both.	5 per cent of net income.	Same as Corporations General. Allocation of capital made on assets.				
<b>SPECIAL*</b>									
<b>1. REAL PROPERTY.</b>	For agricultural or stockraising purposes ½ per cent on assessed value; other improved land 1 per cent on assessed value; coal lands 1 per cent or 2 per cent according to classification.	2 mills on fair actual value.	2 mills on fair actual value.	Amount required to meet provincial share of old age pensions.				One-tenth per cent in cities and towns, six-tenths per cent in municipalities, actual cash value.	Two-fifths of 1 per cent.
<b>2. PERSONAL PROPERTY.</b>								One-tenth per cent in cities and towns, six-tenths per cent in municipalities, actual cash value.	One-half of 1 per cent on actual value.
<b>3. WILD LANDS.</b>	3 per cent on assessed value.	10 mills on fair actual value.	10 mills on fair cash value.		1 per cent of market value of land in unorganized territory; one-half of 1 per cent on land where school taxes are paid. Small lots, minimum of \$2 per parcel, large areas, minimum of 2c. per acre.		2c. per acre on area of 500 acres or more.	1 per cent on 1,000 acres or more. Fire tax ¼c. per acre on wild lands over 200 acres.	
<b>4. TIMBER AREAS.</b>	1½ per cent on assessed value. Royalties under Forest Act.	2 cents per acre. \$5 minimum tax.	1 cent per acre. ½ cent if timber is manufactured into lumber.	Graded according to use allowed from \$1 up.	Fire protection \$6.40 per sq. mile. Rentals \$5 per sq. mile. Timber dues vary per kind and amount cut.		Same as Wild Lands.		
<b>5. MINES AND MINERALS.</b>	2 per cent on smelter returns, less treatment and transportation costs, alternative to income tax; unworked Crown granted mineral claims, 25c. per acre. Coal and coke 10c. per ton on output, alternative to income tax.	Licences and permits issued at varying rates.		Same as timber areas.	5c. per acre on claims over 10 acres. Prospectors' licences \$5. Recording claim \$5 or \$10. Tax on profits 3 per cent and up.	3 per cent to 7 per cent on annual profits.	Licences and royalties (various).	Licences and permits issued at varying rates.	
<b>6. GASOLINE.</b>	7c. per gallon.	6c. per gallon from April 1, 1933.	6c. per gallon.	7c. per gallon.	6c. per gallon.	6c. per gallon.	7c. per gallon.	5c. per gallon.	6c. per gallon.
<b>7. MOTOR VEHICLES.</b>	Taxed according to units of value and weight.	\$15 to \$35 according to wheelbase.	\$10 to \$32.50 according to wheelbase. Trucks according to gross weight plus load.	\$9 to \$15 according to wheelbase. Trucks \$10 per ton plus \$45 per ton for commercial trucks.	Passenger cars \$7 to \$40, according to h.p. and number of cylinders. Commercial cars \$10 to \$375 according to gross weight. Buses also liable to seat mile tax.	According to weight of vehicle.	Touring cars, 85c. per cwt. Commercial vehicles, \$1.15-\$3 per cwt.	Min. fee of \$15 \$30 and tax according to weight. Commercial vehicle minimum fee of \$17.	20c. per cwt.
<b>8. INCOME.</b>	Graduated.		Graduated; plus surtax of \$5.	5 per cent of net.	1 per cent on net revenue.				Graduated.

\*Alberta also taxes unearned increment at the rate of 5 per cent on increased value of land when sold, and levies a special educational tax of 3 mills on fair actual value.



### **Legislation Affecting the Sale of Shares**

The regulation of the sale of shares comes under the jurisdiction of the provinces and each province has enacted legislation regulating such sale. The laws of the different provinces differ considerably and are subject to frequent change. The aim and intent of all these laws is to protect the purchasers of stocks and bonds from fraud. Generally the laws provide that a company, before selling stock, must furnish to the provincial authorities, a description of its business, and obtain authorization to sell stock. Further particulars with regard to legislation in the various provinces affecting the sale of shares may be obtained from the office of the Provincial Secretary in the capital of the province concerned.

### **TAXATION**

#### **Dominion Taxation**

The Dominion Government levies a tax on the incomes of all persons in Canada, allowing exemptions of \$1,000 for single people, \$2,000 for a married person or couple and \$400 for each dependent minor child, and for certain other classes of dependents. The rate of taxation is such that for an income of \$1,000 in excess of exemptions the tax is \$30; for \$5,000 excess, \$250; for \$10,000 excess, \$750; for \$25,000 excess, \$3,650; for \$100,000 excess, \$26,900; for \$500,000 excess, \$233,150; and 56 per cent on any further income. Deductions are permitted, of certain expenses and on dividends from certain classes of securities, in arriving at the net income.

The income tax applicable direct to corporations is  $12\frac{1}{2}$  per cent of the net income with no exemptions.

There is also a tax of 6 per cent on the sale price of all goods; the sale price on domestic goods to include any other excise duties that may be applicable; on imported goods it is deemed to be the "duty paid value."

Excise duties are levied on a specific list of goods such as liquors, matches, tobaccos and automobile tires.

Minor taxes include stamp taxes on cheques, promissory notes and the like, and imposts on telegraph and cable messages and long distance telephone calls.

Payments to non-residents of Canada on account of anything let, leased or used in Canada, or on account of royalties, is subject to a tax of  $12\frac{1}{2}$  per cent on that portion of the payment in excess of an amount prescribed by the minister.

Further information regarding taxation levied by the Dominion Government may be obtained on application to the Commissioner of Taxation, Department of National Revenue, Ottawa.

#### **Provincial Taxation**

In addition to federal taxation, taxes are levied also by the Governments of the various provinces. The provincial rates of taxation applicable to commercial companies are set forth in the foregoing tabulation, and further information may be obtained upon application to the Provincial Treasurer in the capital of the province concerned.

#### **Municipal Taxation**

In addition to federal and provincial taxation, taxes are levied also by municipalities, and in view of the large number of these, it is obviously impossible to give detailed particulars by localities.

## THE CANADIAN INDUSTRIAL FIELD

### TRADE MARKS AND INDUSTRIAL DESIGNS

These are governed by the Trade Marks and Industrial Designs Act.

"General Trade Mark" means a mark used in connection with the sale of various articles in which the proprietor may deal.

"Specific Trade Mark" means a mark used in connection with the sale of a class of merchandise of a particular description.

"Industrial Design" means a design of some article of commerce distinguishable by its peculiar ornamentation or shape.

A trade mark or industrial design must be registered with the Commissioner of Patents at Ottawa, who will supply a certificate of registration. Once registered, a general trade mark endures without limitation, a specific trade mark for twenty-five year periods, renewable, and exclusive rights to industrial designs for five-year periods, renewable.

### PATENTS

Patents are governed by the Patent Act (1923). The term of the patent is for eighteen years and application therefore must be made to the Commissioner of Patents, who will issue the prescribed forms and full data regarding the regulations to be complied with.

The following must be filed:—

1. A petition giving name of invention and name and address of applicant in Canada, if so resident, if not, the name and address of some person resident in Canada to represent the patentee for all purposes of the Act and the service of proceedings.
2. An oath or affirmation confirming petition.
3. Specifications in duplicate and claims in triplicate.
4. In the case of a machine, drawings in triplicate showing clearly all parts of the invention.
5. A model when required.

Assignment may be made by an instrument in writing which should be registered at the Patent Office. An unregistered assignment is null and void against a subsequent assignee who registers an assignment.

### A NOTE ON THE CANADIAN BANKING SYSTEM

The Canadian banking system, while originally modelled on Scottish banking practice, has developed along individual lines in harmony with the changing commercial and financial requirements of the Canadian people. It has been described as "a decentralized system of relatively large joint-stock, commercial and industrial banks privately owned and managed, but working under a uniform law and subject to the supervision of the Dominion Government, with the banks kept in competition with each other by the power to organize branches freely."

This power to extend branches freely is perhaps the most distinctive feature of Canadian banking. In conjunction with the power of note issue, it provides remarkably flexible banking machinery, well adapted to a banking field of long distances and widely separated centres of population and production. Thus, a bank receiving deposits in Eastern Canada may lend them the following day, through its branches and by issue of its own notes, at far western points. The system makes for extreme mobility of capital, and economy and uniformity in rates, besides making banking facilities available in the most remote sections.

The extension of branch banks has been accompanied by a decrease in the number of banking institutions. On August 31, 1932, there were 10 banks—known as chartered banks—in the Dominion, with a total of 3,850 branch banks, or a branch for every 2,708 inhabitants. Thus the centralization of banking in Canada is by banks rather than by districts, as is the case in the partially controlled system of the United States.

The banks of Canada have extended their business outside the country itself and on August 31, 1932, there were 167 branches of Canadian banks in other countries, chiefly in Newfoundland, the West Indies and South America, and in the great centres of international finance, London, Paris and New York.

A distinctive feature of Canadian banking is the existence of the Canadian Bankers Association. Through this body, which was incorporated in 1900 and acts under the authority of the Dominion Treasury Board, the co-operation of individual banks is facilitated and encouraged. The Association supervises Clearing House transactions and oversees the printing, issue and destruction of the notes of its members. Complete supervision, a linking together of the credit of the entire system, and the standardization of banking practices through the adherence to common principles are noteworthy results of the Association's existence.

#### CHARTERED BANKS OF CANADA\*

	Capital subscribed	Reserve fund	Total assets
	\$	\$	\$
Bank of Montreal.....	36,000,000	38,000,000	738,205,210
Bank of Nova Scotia.....	12,000,000	24,000,000	256,665,089
Bank of Toronto.....	6,000,000	9,000,000	108,357,700
Banque Provinciale du Canada.....	4,000,000	1,500,000	45,561,599
Canadian Bank of Commerce.....	30,000,000	30,000,000	554,428,772
Royal Bank of Canada.....	35,000,000	35,000,000	707,635,510
Dominion Bank.....	7,000,000	9,000,000	114,431,379
Banque Canadienne Nationale.....	7,000,000	7,000,000	125,296,526
Imperial Bank of Canada.....	7,000,000	8,000,000	126,706,377
Barclays Bank (Canada).....	500,000	500,000	6,532,589
	144,500,000	162,000,000	2,783,820,751

\*Jan. 31, 1933 returns.



## CHAPTER II

### THE MANUFACTURES AND TRADE OF CANADA

#### MANUFACTURES

Canada's manufacturing industry has been built principally around her great wealth of natural resources, the extent and variety of which have been substantial factors in its rapid growth and accompanying diversification. Her vast extent of cultivable agricultural land, her widely distributed and diversified forest areas, the variety and extent of her mineral deposits and the tremendous mileage and acreage of her prolific coastal and inland fishing waters have all combined to supply a wide variety of raw materials, and, in conjunction with the horse power made available through the increased development of her water powers, have gradually and substantially broadened and intensified Canada's industrial production until today she ranks among the leading countries of the world as the second largest producer of manufactured goods among the countries which constitute the British Empire.

The following table indicates the relative values of manufactured production in the United Kingdom and the principal self-governing dominions:—

Year	United Kingdom	Canada	Australia	New Zealand	South Africa	Irish Free State
	£ '000	\$ '000	£ '000	£ '000	£ '000	£ '000
1924.....	3,394,847	2,695,054	348,577	Not available	71,328	Not available
1925.....	Not available	2,948,545	380,844	84,101	75,696	"
1926.....	"	3,247,803	400,342	85,043	82,755	56,155
1927.....	"	3,425,499	408,693	83,013	88,465	57,479
1928.....	"	3,769,850	416,994	87,732	97,285	Not available
1929.....	"	4,063,987	420,445	93,172	104,012	"
1930.....	"	3,428,971	390,912	93,465	102,317	"

#### Growth of Manufacturing

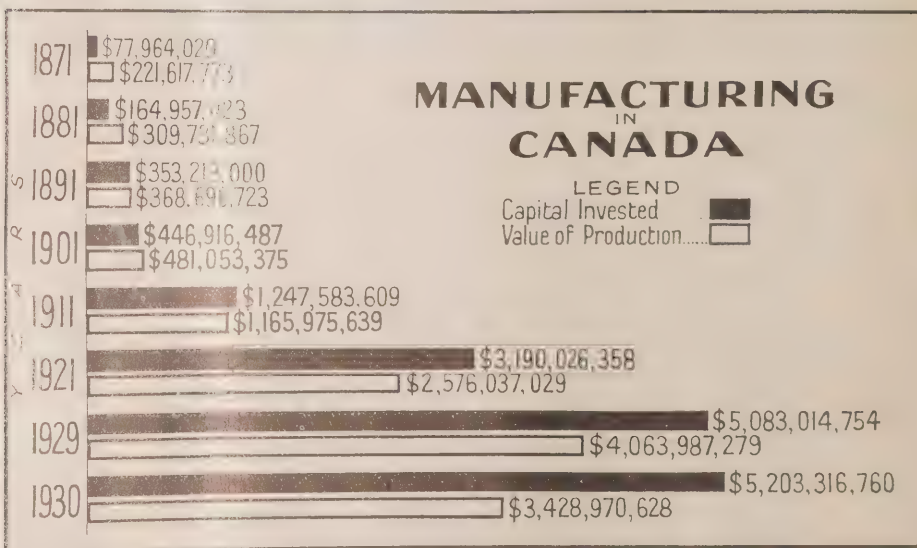
From a very modest beginning in the early '70's, as for example in 1871, a production was recorded amounting to in value a little over \$221,600,000, manufacturing in Canada has consistently grown and reached an all-time high value of production in 1929 of over \$4,000,000,000. Capital invested in Canada's manufacturing industry increased from slightly less than \$78,000,000 in 1871 to over \$5,000,000,000 in 1929 while the salary and wage distribution increased from approximately \$41,000,000 among 188,000 employees to over \$800,000,000 among 700,000 employees during the same period.

The following table contains a statistical summary which will indicate the progress made in Canada's manufacturing industry:—

Year	Employees	Capital	Salaries and wages	Gross value of production
	No.	\$	\$	\$
1871.....	187,942	77,964,020	40,851,009	221,617,773
1881.....	254,894	164,957,423	59,401,702	309,731,867
1891.....	272,033	353,213,000	79,234,311	368,696,723
1901.....	339,172	446,916,487	113,249,350	481,053,375
1906.....	383,920	833,916,155	162,155,578	706,446,578
1911.....	515,203	1,247,583,609	241,008,416	1,165,975,639
1916.....	—	1,958,705,230	283,311,505	1,381,547,225
1921.....	456,076	3,190,026,358	518,785,137	2,576,037,029
1926.....	581,539	3,981,569,590	653,850,933	3,247,803,438
1928.....	658,023	4,780,296,049	755,199,372	3,769,847,364
1929.....	694,434	5,083,014,754	813,049,842	4,063,987,279
1930.....	644,439	5,203,316,760	736,092,766	(a) 3,428,970,628

(a) Total value of manufactured products does not include, for 1930, the value of electrical energy purchased for resale by central electric stations, and which amounted to \$38,795,768.

The trends in the values of capital invested and production in the Canadian manufacturing industry during the past sixty years are graphically represented below.



### Principal Manufacturing Groups

Vegetable products constitute the most important division of Canada's manufacturing industry and, coupled with animal products, contribute upwards of 30 per cent of the total value of Canadian manufactures. Second in importance are wood and paper products which join with iron and steel and textile

products to contribute 45 per cent of the annual production value. Following in order of importance and contributing the balance of Canada's manufactures are non-ferrous metal products, non-metallic mineral products, chemical and allied products and miscellaneous industries.

The value of production in each of the classes for the years 1917-1930 are shown in the following tabulation:—

VALUES OF CANADA'S MANUFACTURES BY INDUSTRIAL GROUPS  
(With Percentages of Canada's Total)

Year	Vegetable products		Animal products		Textile products		Wood and paper products		Iron and steel products	
	\$ '000	%	\$ '000	%	\$ '000	%	\$ '000	%	\$ '000	%
1917.....	546,556	19.0	444,406	15.4	248,219	8.6	398,914	13.8	692,305	24.1
1918.....	597,823	18.2	479,994	14.6	320,433	9.8	450,265	13.7	723,593	22.0
1919.....	697,672	21.2	543,428	16.5	377,126	11.5	574,439	17.5	597,941	18.2
1920.....	766,802	20.4	553,491	14.2	429,974	11.5	724,067	19.2	715,116	19.0
1921.....	569,572	22.1	379,412	14.7	304,913	11.9	487,117	18.8	382,398	14.9
1922.....	537,536	21.3	371,552	15.0	308,560	12.5	489,815	19.8	331,585	13.4
1923.....	547,674	19.7	384,086	13.9	334,439	12.0	556,025	19.9	465,960	16.7
1924.....	585,946	21.7	379,777	14.1	321,355	11.9	546,504	20.3	370,089	13.7
1925.....	632,211	21.1	431,778	14.7	337,189	11.4	557,194	19.0	411,379	14.0
1926.....	658,321	20.2	452,035	13.9	366,335	11.3	600,065	18.5	505,189	15.5
1927.....	712,700	20.8	457,716	13.4	382,007	11.1	629,567	18.4	525,922	15.3
1928.....	756,996	20.1	485,022	12.8	415,402	11.0	682,550	18.1	609,633	16.2
1929.....	771,458	19.0	477,762	11.8	426,248	10.5	725,820	17.8	738,013	18.2
1930.....	672,024	19.6	417,541	12.2	361,815	10.5	636,600	18.6	569,746	16.6
Average per cent.	—	20.3	—	14.1	—	11.1	—	18.1	—	17.0

Year	Non-ferrous metal products		Non-metallic mineral products		Chemicals and allied products		Miscellaneous industries		Total all industries
	\$ '000	%	\$ '000	%	\$ '000	%	\$ '000	%	\$ '000
1917.....	87,485	3.0	99,527	3.4	230,450	8.0	125,406	4.7	2,873,268
1918.....	79,395	2.4	113,333	3.4	336,150	10.2	188,778	5.7	3,289,764
1919.....	71,507	2.2	127,880	3.8	94,567	2.8	205,941	6.3	3,290,501
1920.....	101,281	2.7	159,417	4.3	127,828	3.4	194,274	5.3	3,772,250
1921.....	72,590	2.8	143,058	5.6	88,604	3.4	148,373	5.8	2,576,037
1922.....	70,856	2.9	141,288	5.8	95,944	3.9	136,073	5.4	2,482,209
1923.....	88,199	3.2	143,976	5.2	111,244	4.0	149,562	5.4	2,781,165
1924.....	93,223	3.5	138,574	5.2	108,217	4.0	151,369	5.6	2,695,054
1925.....	159,770	5.4	144,249	5.0	112,907	3.9	161,869	5.5	2,948,546
1926.....	183,502	5.6	174,157	5.3	122,590	3.9	185,612	5.8	3,247,806
1927.....	200,370	5.9	175,746	5.1	127,485	3.7	213,986	6.3	3,425,499
1928.....	237,967	6.3	206,082	5.5	146,976	3.9	229,222	6.1	3,769,850
1929.....	283,546	7.0	242,024	5.9	138,545	3.4	260,573	6.4	4,063,989
1930.....	250,459	7.3	216,813	6.3	119,970	3.5	184,004	5.4	3,428,972
Average per cent.	—	4.3	—	5.0	—	4.4	—	5.7	—

NOTE.—Miscellaneous industries include central electric stations.



### The Leading Manufacturing Industries

The manufacture of pulp and paper products is the leading individual Canadian industry, a value in excess of \$215,000,000 being attained in 1930. It has been consistently responsible for upwards of 6 per cent of the annual production of Canadian manufactured goods during the greater part of the past decade. Following in order of importance are the slaughtering and meat packing, flour and grist mill products, central electric stations, sawmills, butter and cheese, railway rolling stock, electrical apparatus and supplies, automobiles, and non-ferrous metal smelting and refining industries, the production of which ranged from \$164,000,000 to \$101,000,000 in 1930. These ten industries were responsible for the manufacture of \$1,296,000,000 worth of goods in 1930 or 38 per cent of Canada's total production. Of interest in connection with these industries are the changes in the position of railway rolling stock, the electrical apparatus and supplies, and the non-ferrous metal smelting and refining industries which have respectively advanced from 20th to 7th, from 17th to 8th, and from 30th to 16th position since 1921. It is also of interest to note that the fruit and vegetable canning, bridge and structural steel work, dyeing, cleaning and laundry work, brass and copper products, and distilleries have so increased their production that they are presently included among the forty leading Canadian industries.

Two tables respectively showing the principal statistics for the forty leading industries of Canada in 1930 and the yearly values of production of these particular industries from 1921 to 1930 follow:—

## THE CANADIAN INDUSTRIAL FIELD

PRINCIPAL STATISTICS OF THE FORTY LEADING INDUSTRIES—1930

Industries	Number of establishments	Capital \$	Em- ployees	Salaries and wages \$	Cost of materials \$	Net value of products \$	Gross value of products \$
1. Pulp and paper.....	109	714,437,104	33,207	45,774,976	81,992,225	133,681,991	215,674,246
2. Slaughtering and meat packing.....	76	60,778,996	9,290	12,114,667	129,004,324	35,029,953	164,029,953
3. Flour and grist mill products.....	1,277	62,617,007	5,923	6,679,113	119,077,686	25,178,260	144,855,946
4. Central electric stations.....	1,034	1,138,200,016	17,858	27,287,443	126,038,145	126,038,145	126,038,145
5. Sawmills.....	3,531	181,116,933	43,457	28,512,901	72,956,762	48,186,223	121,142,985
6. Butter and cheese.....	2,698	50,502,406	11,980	13,071,916	30,559,841	32,458,948	113,018,789
7. Railway rolling stock.....	37	95,785,640	25,952	37,625,050	60,289,445	44,633,256	104,922,701
8. Electrical apparatus and supplies.....	149	102,979,896	20,568	26,200,004	43,111,629	61,466,161	104,577,790
9. Automobiles.....	16	170,671,678	12,841	19,473,782	66,924,019	34,753,468	101,677,487
10. Petroleum metal smelting and refining.....	14	75,470,366	18,100,124	45,800,472	55,685,664	100,946,136	100,946,136
11. Petroleum products.....	22	70,324,381	8,936	7,837,130	19,986,776	21,781,205	91,781,205
12. Cigars, cigars and cigarettes.....	103	57,351,115	24,580,429	61,385,032	61,385,032	93,671,786	93,671,786
13. Cottons and forging of footwear.....	340	100,318,189	20,495	25,871,711	28,565,754	74,723,671	74,723,671
14. Biscuits.....	2,697	69,164,512	15,163	15,895,471	28,821,792	43,910,069	43,910,069
15. Bread and other bakery products.....	776	51,914,170	17,736	16,444,533	36,582,833	37,012,035	73,561,894
16. Printing and publishing.....	455	23,432,624	17,063	29,937,052	35,993,916	56,019,255	72,013,171
17. Confectionery, chocolate, etc.....	280	54,406,093	16,782	16,483,011	35,759,351	26,056,597	61,815,048
18. Biscuits, confectionery, chocolate, etc.....	73	67,637,142	4,642	6,756,634	16,534,273	33,014,701	58,059,602
19. Hosiery, knit goods and fabric gloves.....	167	65,047,351	18,570	7,057,147	25,509,913	28,608,011	57,517,089
20. Machinery.....	174	69,454,103	11,044	15,089,887	18,326,621	35,422,861	53,749,482
21. Primary iron and steel.....	49	112,079,926	9,723	14,934,325	22,765,648	29,823,287	52,588,935
22. Cotton, yarn and cloth.....	33	78,542,804	16,999	13,004,793	27,975,574	20,717,304	48,692,878
23. Sheet metal products.....	155	53,368,130	8,728	10,452,887	25,090,342	21,977,137	47,067,479
24. Sugar refineries.....	8	43,855,155	2,281	3,560,260	30,610,701	12,325,021	42,935,722
25. Clothing, factory, men's.....	192	26,294,787	10,836	11,542,990	21,533,514	19,285,909	40,819,423
26. Boots and shoes, leather.....	179	28,162,582	13,922	12,838,062	20,521,736	19,957,185	40,478,911
27. Printing and bookbinding.....	905	38,837,176	11,567	15,663,048	11,942,885	25,998,902	37,941,787
28. Furniture and upholstery.....	366	41,495,827	11,980	12,774,596	13,817,450	23,048,745	36,866,195
29. Coke and gas products.....	41	89,987,235	3,970	5,864,802	17,082,364	19,510,495	36,592,859
30. Fishing mills, sash and door factories.....	728	49,333,121	9,651	10,981,763	17,263,379	17,263,379	36,483,594
31. Fish curing and packing.....	699	30,827,607	10,558	4,302,854	21,081,489	11,891,819	32,973,308
32. Fruit and vegetable canning, preserving, etc.....	249	35,119,475	9,137	4,155,595	19,816,763	11,641,652	31,458,415
33. Agricultural implements.....	247	98,684,828	7,405	9,564,049	11,353,523	15,548,616	26,902,139
34. Bridge and structural steel work.....	13	28,922,951	4,943	8,686,062	12,549,435	13,506,348	26,055,783
35. Dyeing, cleaning and laundry work.....	387	28,351,092	12,732	12,141,767	2,807,911	22,664,753	25,472,664
36. Brass and copper products.....	117	26,820,527	5,297	6,742,752	13,355,186	12,057,039	25,412,225
37. Furnishing goods, men's.....	158	17,597,012	8,965	6,437,718	14,790,909	10,363,401	25,154,310
38. Distilleries.....	15	61,533,825	1,965	2,435,934	6,616,520	18,309,341	24,925,861
39. Paints, pigments and varnishes.....	78	26,212,828	2,835	4,307,998	11,094,435	12,872,067	23,966,502
Total, forty leading industries.....	18,510	4,278,072,371	500,725	569,675,744	1,350,776,368	1,365,214,245	2,715,990,613
Total, all industries.....	24,020	5,203,316,760	644,439	736,092,766	1,666,983,902	1,761,986,726	3,428,970,628
Percentage of forty leading industries to all industries.....	77.06	82.22	77.70	77.39	81.03	77.48	79.21

**PRODUCTION VALUES OF FORTY LEADING INDUSTRIES IN 1930 AND THEIR CORRESPONDING VALUES IN THE YEARS 1921 TO 1929 WITH THEIR PERCENT-  
AGES OF THE TOTAL OF ALL INDUSTRIES**

Industry	1921		1922		1923		1924		1925		1926		1927		1928		1929		1930	
	\$ '000	%	\$ '000	%	\$ '000	%	\$ '000	%	\$ '000	%	\$ '000	%	\$ '000	%	\$ '000	%	\$ '000	%	\$ '000	%
Pulp and paper.....	151,003	5-8	158,951	6-3	184,415	6-5	179,260	6-5	193,093	6-5	215,370	6-6	219,330	6-4	233,077	6-2	243,971	6-0	215,674	6-3
Slaughtering and meat packing.....	153,136	5-9	142,999	5-7	138,219	4-9	133,740	4-9	163,817	5-6	167,127	5-6	167,221	4-9	174,096	4-6	185,843	4-6	164,030	4-8
Flour and grist mill products.....	179,632	6-9	166,882	6-7	154,896	5-5	180,308	6-6	187,945	6-4	189,381	5-8	191,731	5-6	195,098	5-2	181,149	4-5	184,856	4-2
Central electric stations.....	73,636	2-8	82,329	3-3	91,141	3-2	95,170	3-5	102,588	3-5	115,468	3-6	134,819	3-9	143,692	3-8	157,499	3-9	126,038	3-7
Sawmills.....	116,891	4-5	114,325	4-6	139,895	4-9	141,930	5-2	134,414	4-6	135,183	4-2	133,621	3-9	139,425	3-7	146,990	3-6	121,143	3-5
Butter and cheese.....	97,654	3-8	95,471	3-8	106,405	3-7	108,812	4-0	124,839	4-2	120,193	3-7	122,524	3-6	130,212	3-5	126,703	3-1	113,019	3-3
Railway rolling stock.....	40,246	1-6	26,311	1-0	68,214	2-4	45,130	1-6	53,051	1-8	72,706	2-2	74,467	2-2	73,422	2-0	126,487	3-1	104,923	3-3
Electrical apparatus and supplies.....	44,497	1-7	41,208	1-6	51,360	1-8	56,491	2-1	60,159	2-0	69,767	2-1	78,550	2-3	93,672	2-5	113,796	2-8	104,578	3-1
Automobiles.....	67,050	2-6	81,957	3-3	96,614	3-4	88,480	3-2	110,835	3-8	133,598	4-1	128,700	3-8	162,868	4-3	177,316	4-4	101,677	3-0
Non-ferrous metal smelting and refining.....	23,732	0-9	23,637	0-9	25,254	1-2	42,155	1-5	56,644	1-9	72,854	2-2	77,996	2-3	94,342	2-5	109,884	2-7	100,946	2-9
Petroleum products.....	66,960	2-6	56,496	2-3	45,572	1-6	48,677	1-8	50,762	1-7	71,196	2-2	64,529	1-9	83,122	2-2	99,408	2-4	91,787	2-7
Tobacco, cigars and cigarettes.....	52,050	2-0	62,627	2-3	59,840	2-1	59,953	2-2	60,154	2-0	65,184	2-0	71,124	2-1	76,827	2-0	85,165	2-1	85,672	2-2
Castings and forgings.....	42,205	1-6	36,508	1-3	70,253	2-5	56,789	2-1	61,854	2-1	70,236	2-2	69,395	2-0	81,905	2-2	91,575	2-3	74,234	2-2
Rubber goods, including footwear.....	25,618	0-9	31,778	1-3	56,513	2-0	57,411	2-1	78,230	2-7	86,508	2-7	91,414	2-7	97,209	2-6	96,935	2-4	73,753	2-1
Bread and other bakery products.....	51,368	2-0	47,846	1-9	48,859	1-7	54,403	2-0	60,392	2-0	62,920	1-9	68,726	2-0	71,227	1-9	77,234	1-9	73,595	2-1
Printing and publishing.....	53,613	2-1	50,993	2-0	49,359	1-8	53,034	2-0	53,887	1-8	57,042	1-8	62,031	1-8	67,880	1-8	73,673	1-8	72,013	2-1
Clothing, factory, women's.....	35,256	1-4	41,644	1-7	42,983	1-5	46,100	1-7	46,780	1-6	50,568	1-6	56,316	1-6	63,327	1-7	66,346	1-6	61,816	2-0
Biscuits, confectionery, chocolate, etc., Breweries.....	46,758	1-8	42,416	1-7	48,394	1-7	45,124	1-6	46,745	1-6	49,179	1-5	53,129	1-6	60,404	1-6	62,493	1-5	58,606	1-7
Hosiery, knit goods and fabric gloves.....	30,932	1-2	25,876	1-0	79,260	1-0	55,553	1-2	38,898	1-3	43,603	1-3	51,528	1-5	60,910	1-6	62,261	1-5	57,521	1-7
Machinery.....	36,690	1-4	44,963	1-8	47,522	1-7	44,506	1-6	48,555	1-7	53,676	1-7	55,222	1-6	58,552	1-6	61,098	1-5	54,118	1-6
Primary iron and steel.....	21,608	0-8	15,418	0-6	28,901	1-0	28,653	1-0	30,466	1-0	38,381	1-2	44,602	1-3	51,066	1-4	65,693	1-6	53,749	1-4
Cotton, yarn and cloth.....	56,202	2-3	35,427	1-4	66,071	2-3	33,553	1-2	35,338	1-2	41,184	1-3	45,571	1-3	62,072	1-6	72,232	1-8	52,580	1-5
Sheet metal products.....	65,979	2-5	72,175	2-9	79,334	2-8	69,985	2-6	72,782	2-5	76,274	2-4	75,819	2-2	79,220	2-1	78,242	1-9	48,693	1-4
Sugar refineries.....	26,775	1-0	30,210	1-2	31,020	1-1	30,569	1-1	34,442	1-2	39,871	1-2	43,845	1-2	48,628	1-2	40,479	1-2	42,936	1-2
Clothing, factory, men's.....	69,510	2-7	70,823	2-7	77,004	2-7	67,292	2-5	68,446	2-3	64,271	2-0	60,503	1-8	52,085	1-4	47,152	1-2	40,580	1-2
Boots and shoes, leather.....	44,665	1-7	45,504	1-8	45,596	1-6	42,004	1-5	40,023	1-4	46,096	1-4	47,373	1-3	48,477	1-3	50,580	1-2	40,919	1-2
Printing and bookbinding.....	33,415	1-3	30,566	1-2	34,506	1-2	32,408	1-1	31,713	1-1	32,336	1-0	35,826	1-0	41,018	1-1	43,749	1-1	37,942	1-1
Furniture and upholstery.....	23,978	0-9	22,139	0-9	26,235	0-9	25,844	0-9	27,110	0-9	31,293	1-0	35,734	1-0	41,826	1-1	44,136	1-1	36,864	1-1
Coke and gas products.....	33,288	1-3	26,426	1-1	33,507	1-2	28,540	1-0	28,895	1-0	33,526	1-0	34,045	1-0	34,708	0-9	36,593	1-0	36,486	1-1
Planing mills, saw and door factories.....	35,186	1-4	37,427	1-5	43,823	1-6	40,909	1-4	40,099	1-4	43,426	1-3	47,955	1-4	52,700	1-4	56,592	1-4	36,864	1-1
Fish curing and packing.....	18,894	0-7	25,566	1-1	25,375	0-9	26,638	1-0	30,381	1-0	36,191	1-1	31,085	0-9	36,268	1-0	34,966	0-9	32,973	0-9
Fruit and vegetable canning, preserv- ing, etc.....	10,562	0-4	18,037	0-7	15,203	0-5	19,202	0-7	23,376	0-8	23,231	0-7	21,623	0-6	24,890	0-7	27,960	0-7	31,458	0-8
Agricultural implements.....	36,793	1-4	18,241	0-7	26,026	0-9	26,447	1-0	24,770	0-8	28,369	1-2	42,996	1-3	41,200	1-1	40,659	1-0	26,902	0-9
Bridge and structural steel work.....	12,049	0-5	3,169	0-1	5,155	0-2	10,610	0-4	10,364	0-4	16,037	0-5	18,681	0-5	22,584	0-6	34,179	0-6	26,036	0-8
Dyeing, cleaning and laundry work.....	13,414	0-5	14,630	0-6	15,582	0-6	15,577	0-6	15,578	0-6	17,642	0-5	20,102	0-6	23,619	0-6	26,559	0-7	25,473	0-7
Brass and copper products.....	6,084	0-2	12,254	0-5	10,794	0-6	15,488	0-6	19,155	0-7	22,029	0-7	24,055	0-7	28,457	0-8	36,116	0-9	25,412	0-7
Furnishing goods, men's.....	17,946	0-7	23,293	0-9	25,502	0-9	22,175	0-8	23,040	0-8	26,395	0-8	30,315	0-8	30,582	0-7	35,154	0-7	25,154	0-7
Distilleries.....	7,461	0-3	5,297	0-1	4,226	0-1	4,226	0-1	4,226	0-1	4,226	0-1	4,226	0-1	4,226	0-1	4,226	0-1	4,226	0-1
Paints, pigments and varnishes.....	18,044	0-7	20,221	0-8	21,553	0-8	20,201	0-7	22,234	0-8	24,803	0-8	25,229	0-7	27,868	0-7	27,103	0-7	23,967	0-7
Totals.....	1,984,474	76-4	1,935,206	77-2	2,222,495	78-9	2,174,704	79-4	2,358,235	80-0	2,606,710	80-2	2,724,490	79-5	2,998,510	79-5	3,247,118	79-9	2,715,991	79-2
Total, all industries.....	2,599,969	—	2,505,836	—	2,816,419	—	2,737,209	—	2,948,545	—	3,247,803	—	3,425,499	—	3,769,850	—	4,063,987	—	3,428,971	—

NOTE.—The total for all industries for 1921-1924 inclusive includes the production for "Non-ferrous metals melting and refining" which prior to 1925 was included in mining.





### Industrial Zones

Canada may be divided into four principal manufacturing zones as follows:—

Great Lakes-St. Lawrence Valley zone—represented by the provinces of Ontario and Quebec.

Prairie Provinces zone—represented by Manitoba, Saskatchewan and Alberta.

Pacific Coast zone—represented by the province of British Columbia and the Yukon Territory.

Maritime zone—represented by New Brunswick, Nova Scotia and Prince Edward Island.

The following tables present respectively a comparison of the principal statistics of the manufacturing industry in the different Canadian zones in 1930, and a comparison of the trend of production in these zones during the past decade.

PRINCIPAL STATISTICS OF CANADA'S MANUFACTURING INDUSTRY  
BY ZONES—1930

Zone	Plants	Capital em- ployed	Em- ployees	Salaries and wages	Cost of materials	Value of products	Per cent of total
	No.	\$ '000	No.	\$ '000	\$ '000	\$ '000	
<b>GREAT LAKES-ST. LAWRENCE—</b>							
Population 6,306,000.							
Ontario.....	9,888	2,431,370	307,477	370,781	836,667	1,713,025	49.96
Quebec.....	7,410	1,727,064	204,802	216,836	462,244	1,022,281	29.81
	17,298	4,158,434	512,279	587,617	1,298,911	2,735,306	79.77
<b>PRAIRIE PROVINCES—</b>							
Population 2,353,000.							
Manitoba.....	937	188,413	26,488	33,941	74,762	142,425	4.15
Alberta.....	845	109,931	14,099	17,092	53,622	94,315	2.75
Saskatchewan.....	750	65,486	7,248	9,230	35,608	62,277	1.82
	2,532	363,830	47,835	60,263	163,992	299,017	8.72
<b>PACIFIC COAST—</b>							
Population 698,000.							
British Columbia and Yukon.....	1,697	403,328	42,779	54,899	123,131	241,122	7.03
<b>MARITIME—</b>							
Population 1,009,000.							
Nova Scotia.....	1,302	133,671	21,069	17,538	44,506	85,803	2.50
New Brunswick.....	924	140,612	18,422	14,988	33,897	63,468	1.86
Prince Edward Island.....	267	3,442	2,055	788	2,547	4,255	0.12
	2,493	277,725	41,546	33,314	80,950	153,526	4.48
<b>TOTALS—CANADA.....</b>	<b>24,020</b>	<b>5,203,317</b>	<b>644,439</b>	<b>736,093</b>	<b>1,666,984</b>	<b>3,428,971</b>	<b>100.0</b>

## THE CANADIAN INDUSTRIAL FIELD

## REGIONAL VALUES OF CANADA'S MANUFACTURES

(With Percentages of Canada's Total Values)






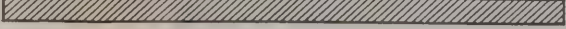



Year	GREAT LAKES-ST. LAWRENCE			MARITIME						
	Ontario	Quebec	Total	Prince Edward Island	Nova Scotia	New Brunswick	Total			
	\$ '000	%	\$ '000	\$ '000	%	\$ '000	\$ '000	%	\$ '000	%
1910	30,712	79.8	3,136	0.3	52,706	4.5	35,422	3.0	91,265	7.8
1915	37,586	79.8	4,696	0.3	69,388	5.4	37,304	2.7	109,237	7.9
1917	48,713	79.8	5,992	0.2	87,896	4.5	60,462	2.1	226,575	7.9
1918	50,900	79.8	6,311	0.2	98,399	4.9	65,454	2.0	218,052	6.7
1920	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
1925	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
1930	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
1935	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
1940	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
1945	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
1950	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
1955	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
1960	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
1965	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
1970	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
1975	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
1980	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
1985	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
1990	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
1995	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
2000	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
2005	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
2010	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
2015	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
2020	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
2025	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
2030	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
2035	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
2040	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
2045	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
2050	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
2055	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
2060	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
2065	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
2070	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
2075	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
2080	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
2085	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
2090	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
2095	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9
2100	50,414	80.2	1,071,252	28.4	2,965,666	78.6	6,386	0.2	148,999	3.9

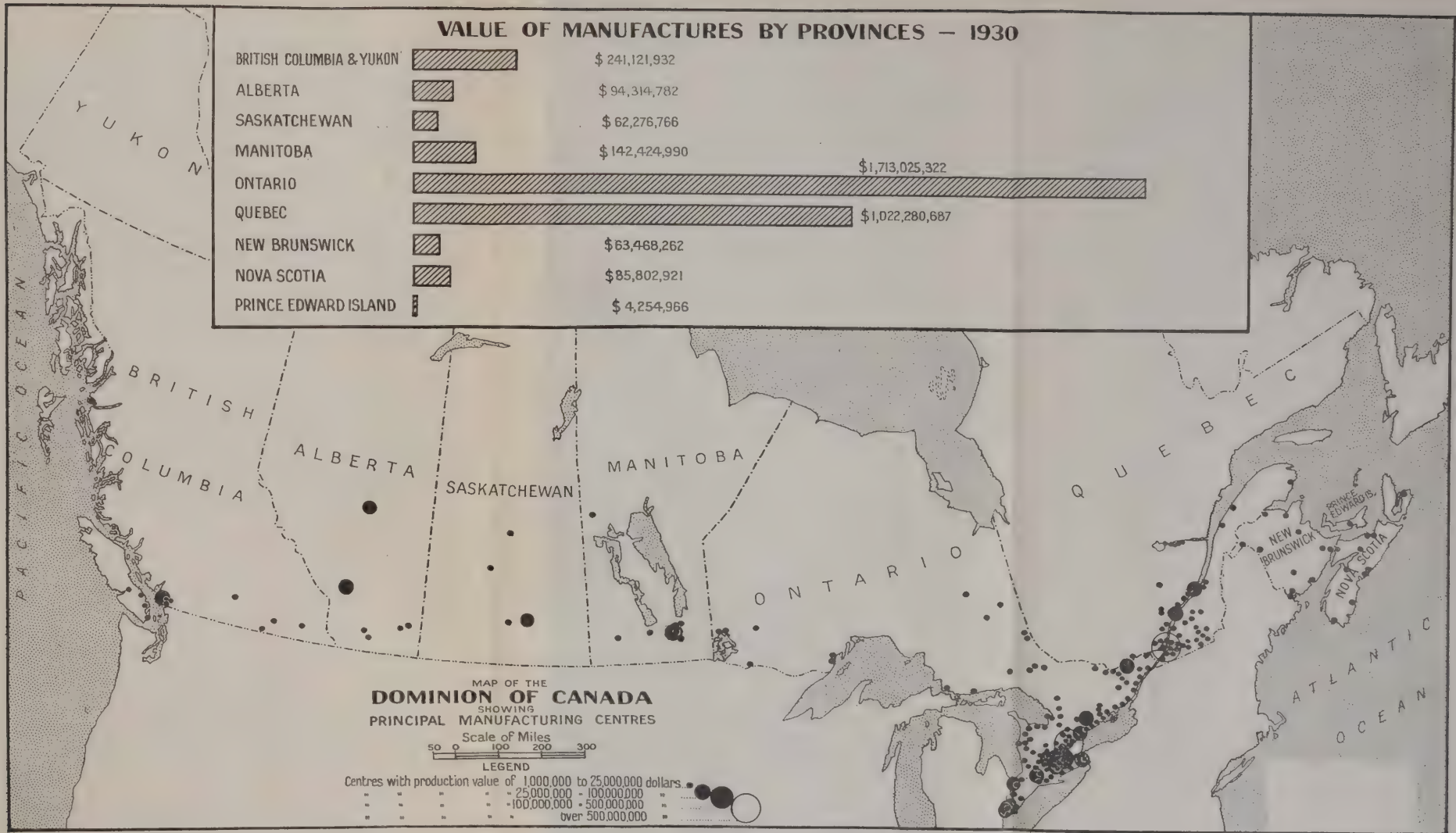
Year	PRAIRIE PROVINCES							PACIFIC COAST		CANADA
	Manitoba	Saskatchewan	Alberta	Total		British Columbia and Yukon	Canada's total values			
	\$ '000	%	\$ '000	%	\$ '000	%	\$ '000	%	\$ '000	%
1910	53,674	4.6	6,332	0.6	18,789	1.6	78,795	6.8	65,204	5.6
1915	60,431	4.4	13,355	1.0	29,416	2.1	105,253	7.5	72,322	5.2
1917	114,947	4.0	37,623	1.3	68,830	2.4	221,400	7.7	163,107	5.7
1918	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
1920	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
1925	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
1930	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
1935	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
1940	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
1945	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
1950	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
1955	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
1960	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
1965	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
1970	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
1975	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
1980	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
1985	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
1990	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
1995	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
2000	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
2005	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
2010	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
2015	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
2020	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
2025	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
2030	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
2035	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
2040	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
2045	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
2050	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
2055	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
2060	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
2065	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
2070	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
2075	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
2080	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
2085	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
2090	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
2095	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2
2100	133,641	4.1	44,295	1.3	77,907	2.4	255,544	7.8	206,320	6.2

It will be seen, from the accompanying tables, that the Great Lakes-St. Lawrence zone, with a population of 6,306,000 or 61 per cent of Canada's total population, contributes the great bulk of manufactured products. It has steadfastly maintained the leading position in Canada's manufacturing industry, the value of manufactured products deviating very little on either side of an 80 per cent contribution to the total value of Canada's production of manufactured goods in the last twenty years. Its constituent parts, Ontario and Quebec, have, roughly speaking, consistently subscribed 50 and 30 per cent respectively of Canada's production during that period. Production in 1930 amounted to \$2,237,000,000, an increase of about 195 per cent over that of 1910, while the per capita production rose from approximately \$209 to \$433 during that time. With 72 per cent of Canada's industrial plants located in this zone, its manufacturing industry gave employment to approximately 80 per cent of Canada's industrial workers and distributed the same percentage of the country's industrial wages in 1930. It also utilized about 78 per cent of the total raw materials consumed by Canada's manufacturing industry and employed about 80 per cent of the total capital investment.



# VALUE OF MANUFACTURES BY PROVINCES — 1930

BRITISH COLUMBIA & YUKON		\$ 241,121,932
ALBERTA		\$ 94,314,782
SASKATCHEWAN		\$ 62,276,766
MANITOBA		\$ 142,424,990
ONTARIO		\$ 1,713,025,322
QUEBEC		\$ 1,022,280,687
NEW BRUNSWICK		\$ 63,468,262
NOVA SCOTIA		\$ 85,802,921
PRINCE EDWARD ISLAND		\$ 4,254,966





Next in order of importance in regard to gross production is the Prairie Provinces' zone in which are included Manitoba, Saskatchewan and Alberta. This zone increased its production of manufactured goods from \$78,975,000 or 6.8 per cent in 1910 to \$299,017,000 or 8.6 per cent of Canada's total in 1930. While the population of this zone showed a general increase since 1910 and, in 1930, amounted to 2,353,000 or 22.7 per cent of Canada's total population, of greater interest was the concurrent increase of 280 per cent in its production value of manufactures and the consequent rise in the per capita production from \$64 to \$127 during the period.

The Pacific Coast zone, comprising British Columbia and the Yukon Territory, with a population of 698,000 or 6.7 per cent of Canada's total, ranked third in respect to the gross value of manufactures in 1930. Increasing from \$65,204,000 or 5.6 per cent in 1910 to \$241,122,000 or 7.0 per cent in 1930, production of manufactured goods in this zone increased approximately 270 per cent, thereby practically duplicating the expansion of the manufacturing industry in the Prairie Provinces' zone during the period. The per capita production increased in this zone from \$171 in 1910 to \$345 in 1930, thereby ranking second in this respect to the Great Lakes-St. Lawrence zone.

The Maritime zone, consisting of the provinces of Nova Scotia, New Brunswick and Prince Edward Island, increased its production of manufactured goods from \$91,265,000 in 1910 to \$153,526,000 in 1930 or 68 per cent. Per capita production increased from \$98 to \$152 during the period.

#### **Leading Manufacturing Centres**

The principal Canadian manufacturing centres today are Montreal and Toronto with totals of \$532,000,000 and \$522,000,000 respectively. The manufacturing industries of these centres consistently supply upwards of thirty per cent of Canada's total manufactures, and joined with those of 46 other centres, with industrial production values in excess of \$10,000,000, to produce 70 per cent of Canada's total manufactures in 1930. The following table shows the percentages of production in the principal industrial centres of the different zones for the three year period 1928 to 1930.





	1928				1929				1930				Popula- tion (Census 1931)	
	Per cent of		Per cent of		Per cent of		Per cent of							
	Value	Zone total	Can- adian total	Value	Zone total	Can- adian total	Value	Zone total	Can- adian total					
	\$ '000			\$ '000			\$ '000			No.				
PRAIRIE PROVINCES—Concluded														
<i>Saskatchewan.</i>	—	—	—	—	—	—	—	—	—	921,605				
Regina.....	19,484	6.1	0.52	34,842	9.9	0.86	25,962	8.6	0.75	53,209				
Saskatoon.....	13,118	4.1	0.35	15,961	4.5	0.39	12,741	4.2	0.37	43,291				
Moose Jaw.....	14,473	4.5	0.38	14,646	4.2	0.36	11,422	3.8	0.33	21,299				
<i>Alberta.</i>	—	—	—	—	—	—	—	—	—	731,605				
Calgary.....	42,418	13.3	1.13	44,695	12.7	1.10	39,231	13.1	1.14	83,761				
Edmonton.....	24,925	7.8	0.66	30,388	8.6	0.75	27,660	9.2	0.80	79,197				
PACIFIC COAST														
270,851	100.0	7.18		276,951	100.0	6.82	241,122	100.0	7.03	698,493				
<i>British Columbia.</i>	—	—	—	—	—	—	—	—	—	694,493				
Vancouver.....	94,132	34.8	2.50	99,646	36.0	2.46	90,975	37.7	2.65	246,593				
New Westminster.....	14,718	5.4	0.39	16,531	6.0	0.41	13,812	5.7	0.40	17,524				
Victoria.....	13,586	5.0	0.36	14,417	5.2	0.35	12,253	5.1	0.36	39,082				





based on the possession of or proximity to large deposits of metallic and non-metallic basic minerals. The Maritime zone has all the coal of eastern Canada which may be used advantageously in the reduction of the iron and other metallic mineral deposits of Newfoundland. This zone also has deposits of salt, gypsum, lime, barytes, and other non-metallic minerals to draw from while the Pacific zone enjoys similar advantages from the raw materials viewpoint in addition to which cheap hydro-electric power is available. Both of these coastal zones offer a cheap and rapid water communication with the ports of the British Isles and the United States.

In a general study of the possibilities of industrial expansion in the various Canadian zones, the manufacturer should thoroughly review the factors in connection with the Prairie Provinces. With, as has already been pointed out, about 22.7 per cent of the population of Canada located in that region and the manufacturing industry producing but 8.7 per cent of Canada's total production, a large potential market is apparent. Herein lies one of the world's most productive agricultural areas—the great Canadian wheat belt—as well as the breeding ground for about thirty per cent of Canada's livestock, from both of which sources come the raw materials which provide the basis for a large percentage of vegetable and animal products. It is, like the other zones, completely served by railways and the wealth of its mineral products and water powers, the proven development of which is further advanced in Manitoba than in the other provinces in this zone, is only beginning to be appreciated.

In addition to the water transportation facilities provided by the Great Lakes inland waterway for the Great Lakes-St. Lawrence zone, and the great sea highway available to ports in the Maritime and Pacific zones, all the zones are tapped by the Canadian National Railways and the Canadian Pacific Railway, two of the greatest railway systems in the world. With their undisputed leadership in mileage of main and branch lines, tapping all the productive areas in Canada and portions of the more thickly populated areas of United States, Canada's industrial centres enjoy a very enviable position. The connections which have, furthermore, been established by these systems with the principal American railways gives to the Canadian industrial zones a railway connection with the various sources of raw materials and with the larger consuming areas of the North American continent which, in conjunction with the advantages of the Great Lakes waterway and the ocean ports, provides a feature of the greatest economic importance to the future expansion of Canada's industry and trade.

Further statistical information regarding Canadian industries may be obtained on application to the Dominion Bureau of Statistics at Ottawa.

## TRADE OF CANADA

### Foreign Trade

The growth of the manufacturing industry in Canada is largely reflected in the development of foreign trade which has followed the increased demand for Canadian products in a large percentage of the leading world markets. Advancing from 9th position in world trade in 1913 to 5th position in 1930, Canada has, at the same time, increased the value of her foreign trade from \$1,095,000,000 or \$145.50 per capita to \$1,874,900,000 or \$188.50 per capita.

Of particular interest is the development which has taken place in the export of a number of products that are largely indigenous to the Dominion.

She presently leads in the exports of newsprint, the value in 1930 being approximately 63 per cent of the total from the principal exporting countries of the world. She is also the leading exporter of nickel and asbestos and ranks fourth in the exports of wood pulp with 14 per cent of the exports from eleven of the principal countries. Canada led the world in the export of wheat in the twelve months August 1, 1930, to July 31, 1931, and was second in the export of flour during that period. She also ranked fourth among the cheese exporting countries during that period, having been responsible for approximately 12 per cent of the exports of that commodity. She also occupies a very high position in the export of many other staple products such as lumber, fish, copper ore and blister, whiskey, raw gold, automobiles, raw furs, pulpwood, rubber tires, silver, potatoes, apples, farm implements, lead, rubber footwear, meats and zinc.

#### Position in International Trade

Canada, in 1930, contributed 5.4 per cent of the total value of world trade, and in that connection ranked second to the United Kingdom among the countries which comprise the British Empire. The following table, prepared from information published by the League of Nations, shows the percentages which each of the thirty leading countries contributed to world trade in 1928, 1929 and 1930.

#### PERCENTAGES OF WORLD TRADE

Country	Imports			Exports			Totals		
	1928	1929	1930	1928	1929	1930	1928	1929	1930
United Kingdom.....	15.10	15.24	16.11	10.76	10.76	10.51	12.99	13.08	13.44
United States.....	11.77	12.23	11.06	15.37	15.63	14.31	13.52	13.87	12.61
Germany.....	9.62	9.03	8.56	8.93	9.74	10.85	9.29	9.37	9.65
France.....	6.00	6.13	7.09	6.24	5.96	6.35	6.15	6.20	6.74
Canada.....	5.37	3.66	3.48	4.27	3.63	3.35	3.89	3.68	3.42
Netherlands.....	3.13	3.12	3.36	2.44	2.43	2.61	2.79	2.78	3.00
Belgium.....	2.87	2.78	2.97	2.62	2.68	2.76	2.59	2.73	2.87
India.....	2.63	2.55	2.34	3.69	3.54	3.45	3.14	3.07	2.87
Italy.....	2.89	3.21	3.15	2.41	2.43	2.41	2.91	2.84	2.80
Japan.....	2.80	2.82	2.57	2.71	2.94	2.68	2.78	2.88	2.62
Argentina.....	2.33	2.31	2.13	3.11	2.75	1.94	2.71	2.33	2.04
Russia.....	1.90	1.28	1.88	1.27	1.46	2.02	1.34	1.37	1.95
China.....	2.00	2.28	2.08	2.15	1.97	1.56	2.30	2.13	1.93
Czecho-Slovakia.....	1.66	1.66	1.60	1.92	1.84	1.96	1.77	1.75	1.77
Australia.....	1.67	1.97	1.50	2.07	1.99	2.00	2.01	1.98	1.74
Spain.....	1.67	1.49	1.63	1.25	1.23	1.68	1.47	1.37	1.65
Sweden.....	1.50	1.35	1.54	1.29	1.47	1.57	1.31	1.41	1.55
Denmark.....	1.40	1.30	1.51	1.27	1.31	1.54	1.27	1.30	1.53
Dutch East Indies.....	1.40	1.76	1.23	1.94	1.76	1.82	1.54	1.50	1.81
Switzerland.....	1.48	1.46	1.69	1.25	1.22	1.28	1.37	1.34	1.49
British Malaya.....	1.41	1.40	1.38	1.46	1.58	1.40	1.44	1.43	1.39
Union of South Africa.....	1.15	1.18	1.12	1.38	1.38	1.47	1.26	1.27	1.29
Austria.....	1.19	1.19	1.31	0.95	0.93	0.98	1.14	1.12	1.16
Brazil.....	1.19	1.19	0.90	1.45	1.40	1.21	1.36	1.29	1.05
Poland.....	1.10	0.98	0.87	0.86	0.96	1.03	0.98	0.97	0.95
Irish Free State.....	0.88	0.88	0.93	0.68	0.69	0.82	0.76	0.76	0.88
Norway.....	0.70	0.70	0.98	0.55	0.60	0.69	0.67	0.71	0.84
Algeria.....	0.70	0.65	0.79	0.51	0.46	0.67	0.54	0.56	0.74
New Zealand.....	0.71	0.75	0.68	0.80	0.79	0.77	0.70	0.72	0.72
Mexico.....	0.50	0.52	0.57	0.87	0.86	0.82	0.68	0.69	0.69

Canada's favourable position among twenty of the leading countries in regard to world trade is further shown in the comparative values for the calendar years 1913 and 1930 as contained in the following table.

INTERNATIONAL TRADE OF TWENTY LEADING COUNTRIES FOR CALENDAR YEARS 1913 AND 1930

Country	Imports (Million \$)		Exports (Million \$)		Total Trade (Million \$)		Per capita Total Trade \$	
	1913	1930	1913	1930	1913	1930	1913	1930
United Kingdom.....	3,207.9	4,661.6	2,556.2	2,776.7	5,764.1	7,438.3	125.20	162.06
United States.....	1,756.9	2,995.5	2,448.3	3,781.8	4,205.2	6,781.3	43.33	55.26
Germany.....	2,563.3	2,473.6	2,402.9	2,696.1	4,966.2	5,169.7	74.84	79.84
France.....	1,625.3	2,057.1	1,327.9	1,683.2	2,953.2	3,740.3	74.57	90.93
Canada.....	659.1	989.0	436.2	885.9	1,095.3	1,874.9	145.50	188.52
Netherlands.....	1,575.0	974.1	1,239.4	692.4	2,814.4	1,666.5	458.06	210.94
British India.....	594.1	696.1	781.9	917.4	1,376.0	1,613.5	4.36	5.06
Belgium.....	894.9	863.9	701.5	733.4	1,596.4	1,597.3	210.62	198.18
Italy.....	703.6	907.8	484.7	634.8	1,188.3	1,542.6	34.25	37.00
Japan.....	363.3	746.0	313.5	710.3	676.8	1,456.3	12.93	22.47
Argentina.....	406.6	713.3	465.6	592.6	872.2	1,305.9	100.35	116.66
Australia.....	370.6	448.4	354.0	434.3	724.6	882.7	153.08	137.19
Switzerland.....	370.5	517.1	265.6	343.1	636.1	860.2	168.24	212.29
Sweden.....	226.9	443.1	219.0	415.5	445.9	858.6	79.49	140.29
Denmark.....	208.3	438.0	170.8	406.8	379.1	844.8	136.63	240.01
British South Africa.....	196.5	314.2	133.9	330.6	330.4	644.8	48.30	58.52
Brazil.....	326.0	256.6	314.7	318.5	640.7	575.1	26.35	14.28
Spain.....	252.1	287.5	204.1	270.2	456.2	557.7	22.87	24.68
Norway.....	148.0	283.4	102.1	215.2	250.1	464.1	101.57	164.52
New Zealand.....	104.1	204.1	102.1	180.7	206.2	419.3	195.90	281.36

#### Canada's Share in World Trade

Between 1913 and 1930 Canada made remarkable progress in the expansion of her foreign trade, the trade with forty of the principal countries increasing from \$918,200,000 to \$1,733,000,000, an increase of approximately 90 per cent. The total trade of these principal countries, which in 1930 represented about 80 per cent of the world trade, increased from \$34,868,000,000 to \$44,418,000,000 during the same period or but 27.4 per cent. Imports from Canada by these countries, principal among which were United Kingdom, United States, Germany, France, Italy, Japan and New Zealand increased from \$355,222,000 to \$821,934,000 or 131.5 per cent while the exports to Canada from these countries, the more important of which were United States, United Kingdom, France, Germany and New Zealand increased from \$562,986,000 to \$911,042,000 or 61.8 per cent.

The following table contains information in regard to Canada's foreign trade with forty of the principal countries of the world:—



## THE CANADIAN INDUSTRIAL FIELD

Country	Total Trade		Total Trade of Canada		Imports from Canada		Exports to Canada		Percentage Share of Total Trade	
	1913	1930	1913	1930	1913	1930	1913	1930	1913	1930
	\$ '000	\$ '000	\$ '000	\$ '000	\$ '000	\$ '000	\$ '000	\$ '000	%	%
Belgium.....	1,612,017	1,603,245	1,553	5,667	8,102	3,568	7,251	0.57	0.56	0.56
Denmark.....	400,046	871,750	286	2,279	269	2,046	233	0.07	0.26	0.26
France.....	2,953,192	3,747,099	8,896	35,592	31,571	17,571	18,021	0.30	0.95	0.95
Germany.....	4,966,198	5,358,226	29,655	48,449	15,256	14,399	16,771	0.60	0.60	0.60
Greece.....	57,293	214,642	2,304	2,304	2,408	—	96	—	1.17	1.17
Italy.....	1,188,412	1,542,661	4,528	34,212	2,785	30,716	3,496	0.38	2.22	2.22
Netherlands.....	2,814,350	1,663,128	4,887	10,554	4,795	1,092	6,584	0.17	0.63	0.63
Norway.....	250,106	468,735	4,411	4,411	217	3,664	511	0.94	0.21	0.21
Spain.....	503,720	857,769	4,131	4,131	—	3,338	—	0.10	0.56	0.56
Sweden.....	448,921	863,194	9,800	3,830	13,632	5,978	5,552	0.10	0.56	0.56
Switzerland.....	6,297,570	7,859,354	264,179	327,451	143,377	185,644	115,805	1.54	2.17	2.17
United Kingdom.....	6,297,570	7,859,354	327,451	327,451	143,377	185,644	115,805	1.54	2.17	2.17
British West Indies.....	137,721	137,710	7,740	26,897	4,052	14,214	12,683	10.50	19.68	19.68
Central American States.....	81,408	173,015	1,478	26,197	1,499	3,688	47	0.59	0.11	0.11
Cuba.....	308,952	329,863	4,419	5,579	3,557	2,920	1,922	1.43	1.69	1.69
Mexico.....	248,089	404,426	895	1,151	318	1,744	163	0.36	0.12	0.12
Newfoundland (a).....	30,163	57,395	6,760	11,928	4,855	9,906	1,905	22.41	20.78	20.78
United States.....	4,240,880	6,842,080	529,735	1,030,161	142,128	402,350	627,811	12.49	15.06	15.06
Argentina.....	877,711	1,305,922	1,886	12,846	1,886	8,283	387,607	0.21	0.98	0.98
Bolivia.....	57,908	58,289	10	10	—	—	—	—	0.02	0.02
Brazil.....	641,594	567,252	1,491	1,571	1,331	869	702	0.23	0.28	0.28
British Guiana.....	17,041	19,546	4,512	5,571	692	1,491	4,080	26.48	28.50	28.50
Chile.....	264,927	331,703	424	285	424	279	6	0.16	0.09	0.09
Colombia.....	62,852	170,283	4,694	4,694	—	545	4,149	—	2.75	2.75
Peru.....	74,001	139,209	—	6,028	—	1,116	4,912	—	4.33	4.33
Uruguay.....	123,603	197,773	39	39	—	—	—	—	0.02	0.02
Venezuela.....	47,514	217,386	9	2,491	28	9	—	—	1.15	1.15
British India (c).....	1,440,438	1,398,691	4,662	11,039	29	4,812	4,633	0.32	0.80	0.80
British Malaya.....	614,545	774,716	553	2,299	84	1,451	469	0.09	0.30	0.30
Ceylon.....	132,940	216,527	1,224	2,546	—	566	1,224	0.92	1.18	1.18
China.....	722,405	1,022,615	1,838	7,824	1,362	6,218	476	1,606	0.25	0.77
Japan.....	676,761	1,473,486	3,449	31,704	915	22,851	8,853	2.15	2.15	2.15
Philippines.....	101,086	512,520	97	869	90	361	7	0.508	0.10	0.10
Australia.....	734,795	655,720	5,509	10,581	4,695	6,702	814	3,879	0.75	1.61
Fiji.....	11,041	12,640	426	2,172	102	292	324	1,880	3.87	17.18
New Zealand.....	215,260	422,778	5,138	30,815	2,202	18,508	12,307	2.39	7.29	7.29
Union of South Africa.....	537,783	758,476	4,405	14,639	4,314	12,297	2,936	0.82	1.93	1.93
Egypt.....	294,065	392,383	76	631	49	350	27	0.03	0.16	0.16
Gold Coast.....	41,484	84,498	—	1,108	—	144	964	—	1.31	1.31
Nigeria.....	70,831	133,308	14	4	14	—	—	—	0.02	0.02
Total 40 countries.....	34,868,143	44,418,163	918,208	1,732,976	355,222	821,934	562,986	911,042	2.63	3.90

(a) Statistics for years ended June 30, 1931.

(b) Statistics for years ended June 30, 1931.

(c) Statistics for years ended March 31, 1914 and 1931.

## CANADA'S TRADE BY GROUPS

## IMPORTS

Year ending March 31	Vegetable products		Animal products		Textile products		Wood and paper products		Iron and steel products		Non-ferrous metal products		Non-metallic mineral products		Chemical and allied products		Miscellaneous products		Total products
	\$ '000	%	\$ '000	%	\$ '000	%	\$ '000	%	\$ '000	%	\$ '000	%	\$ '000	%	\$ '000	%	\$ '000	%	\$ '000
1918	148,927	15.5	60,570	6.3	152,311	15.7	28,471	2.9	195,249	20.3	46,080	4.8	130,022	13.5	27,762	2.9	174,141	18.1	963,533
1919	157,495	17.1	41,505	4.5	178,190	19.4	35,400	3.9	192,527	21.0	41,545	4.5	135,450	14.7	34,200	3.7	103,400	11.2	1,919,712
1920	241,846	22.7	95,099	8.9	231,560	21.8	43,183	4.1	186,320	17.5	52,176	4.9	121,956	11.4	30,043	2.9	62,345	5.8	1,064,528
1921	259,431	20.9	61,722	5.0	243,608	19.7	57,450	4.6	245,626	19.8	55,651	4.5	206,095	16.6	37,888	3.0	72,688	5.9	1,240,159
1922	172,666	23.1	46,464	6.2	139,997	18.7	35,791	4.8	110,211	14.8	29,773	3.9	137,604	18.4	24,630	3.3	50,486	6.8	747,804
1923	161,670	20.1	46,737	5.8	170,147	21.2	35,845	4.5	138,724	17.3	37,943	4.7	139,989	17.4	25,793	3.2	46,181	5.8	802,579
1924	186,469	20.8	45,027	5.0	173,796	19.5	40,977	4.6	173,473	19.4	43,433	4.9	155,899	17.5	26,088	2.9	48,205	5.4	893,367
1925	173,586	21.8	41,492	5.2	165,441	20.7	38,185	4.8	134,684	16.9	41,112	5.2	131,013	16.4	24,760	3.1	46,659	5.9	796,932
1926	203,417	21.9	49,186	5.3	184,762	19.8	40,403	4.4	181,197	19.5	47,693	5.1	139,034	15.0	28,404	3.3	53,233	5.7	927,329
1927	213,098	20.6	53,214	5.2	183,584	17.8	47,962	4.7	229,430	22.2	52,748	5.1	156,785	15.2	31,845	3.1	62,315	6.1	1,030,981
1928	238,186	21.6	65,790	5.9	186,994	16.9	51,751	4.6	259,573	23.3	60,190	5.4	153,049	13.8	33,572	3.1	59,936	5.4	1,109,043
1929	233,130	18.4	71,662	5.7	206,439	16.3	59,215	4.7	346,616	27.4	75,438	5.9	166,964	13.2	37,723	3.0	68,492	5.4	1,265,679
1930	227,049	18.2	69,854	5.6	185,241	14.9	60,951	4.9	316,879	25.4	87,950	7.0	186,496	14.9	39,908	3.2	73,946	5.9	1,248,274
1931	177,629	19.6	45,996	5.1	130,717	14.4	46,042	5.1	194,888	21.5	59,623	6.6	153,579	16.9	35,651	3.9	62,488	6.9	906,613
Average	199,614	20.1	56,750	5.7	180,913	18.2	44,402	4.5	207,528	20.9	52,240	5.2	150,995	15.2	31,305	3.1	70,380	7.1	994,038

## EXPORTS (Canadian Products)

Year ending March 31	Vegetable products		Animal products		Textile products		Wood and paper products		Iron and steel products		Non-ferrous metal products		Non-metallic mineral products		Chemical and allied products		Miscellaneous products		Total products
	\$ '000	%	\$ '000	%	\$ '000	%	\$ '000	%	\$ '000	%	\$ '000	%	\$ '000	%	\$ '000	%	\$ '000	%	\$ '000
1918	586,941	38.1	209,497	13.6	30,805	2.0	116,385	7.6	64,837	4.2	89,523	5.8	20,190	1.3	49,416	3.2	372,434	24.2	1,540,028
1919	288,287	23.7	244,991	20.1	28,030	2.3	154,569	12.7	81,911	6.8	79,261	6.5	26,866	2.2	57,203	4.7	355,326	21.0	1,216,444
1920	415,820	33.5	314,018	25.3	34,028	2.8	213,914	17.3	81,786	6.6	54,977	4.4	30,590	2.5	22,436	1.8	71,723	5.8	1,239,492
1921	482,140	40.0	188,360	15.9	18,784	1.6	284,562	23.9	76,501	6.4	45,939	3.0	40,345	3.4	20,143	1.7	32,390	2.7	1,189,164
1922	317,579	42.9	135,799	18.3	4,586	0.6	179,926	24.3	28,312	3.8	27,886	3.8	22,700	3.1	9,423	1.3	14,030	1.9	740,241
1923	407,760	43.8	135,842	14.6	7,851	0.8	228,756	24.5	51,138	5.5	44,388	4.8	27,747	3.0	13,947	1.5	14,053	1.5	931,452
1924	430,932	41.2	140,423	13.4	8,055	0.8	273,355	26.1	66,976	6.4	65,911	6.3	26,898	2.6	15,436	1.5	17,063	1.7	1,035,351
1925	443,299	41.4	163,031	15.2	9,712	0.9	253,610	23.8	57,006	5.4	90,371	8.4	20,875	2.0	16,063	1.5	14,700	1.4	1,069,067
1926	606,059	46.1	190,975	14.5	8,940	0.7	278,675	21.2	74,735	5.7	97,476	7.4	24,713	1.9	17,354	1.3	16,428	1.2	1,315,355
1927	574,994	45.8	167,292	13.3	7,666	0.6	284,120	22.6	74,285	5.9	80,639	6.4	28,881	2.3	16,204	1.3	22,668	1.8	1,256,649
1928	555,111	45.0	165,845	13.4	10,904	0.9	284,543	23.1	62,754	5.1	90,840	7.4	25,950	2.1	17,366	1.4	19,834	1.6	1,231,147
1929	646,514	47.4	158,757	11.6	9,678	0.7	288,622	21.2	82,257	6.0	112,778	8.3	27,402	2.0	19,448	1.4	18,264	1.4	1,363,710
1930	384,636	34.3	133,009	11.9	9,066	0.8	289,567	25.9	78,590	7.0	154,319	13.8	28,545	2.5	22,468	2.0	20,058	1.8	1,120,258
1931	292,280	36.5	83,715	10.5	6,504	0.8	230,604	28.8	38,938	4.9	95,652	11.9	21,108	2.7	12,826	1.6	18,116	2.3	799,743
Average	459,454	40.0	173,682	15.1	13,901	1.2	240,086	20.9	65,745	5.7	80,709	7.0	26,629	2.3	22,137	1.9	67,618	5.9	1,147,150





**Trade in Commodities**

Canada's imports of commodities for consumption averaged, during the 14 year period 1918-1931, nearly \$1,000,000,000, seventy-five per cent of which was contributed by iron and steel, vegetable, textile, and non-metallic mineral products. Prominent among the values of Canada's imports was that of iron and steel in 1929, the year that marked the tremendous expansion in building in Canada. It amounted to nearly \$350,000,000 or 27·4 per cent of Canada's total imports during that year and furthermore constituted the largest annual value ever attained for any group of Canadian imports. Other outstanding values during the period were those of vegetable products with a peak of \$238,186,000 in 1928 and an average of nearly \$200,000,000, followed by textiles and non-metallic mineral products with average annual values of \$180,000,000 and \$151,000,000 respectively.

Exports of Canadian products averaged \$1,150,000,000 during the period. Vegetable products constituted by far the greatest bulk of the exports of Canadian products and, along with animal products, accounted for 55 per cent of the average annual value of Canada's exports in those years. These groups of products reached an all-time high value in 1929 when there were exported goods valued at \$805,000,000 representing 59 per cent of the total value of exports of Canadian products in that year. Next in importance followed wood and paper products, the export value of which increased from \$116,385,000 or 7·6 per cent in 1918 to \$230,604,000 or 28·8 per cent of Canada's total exports in 1931. Wood and paper products maintained an average of over \$240,000,000 or nearly 21 per cent of Canada's total exports during the 14 year period, and incidentally reached a high value of \$289,567,000 in 1930.

The foregoing inset table shows the imports for consumption and the exports of Canadian products by main groups for the fiscal years ending March 31, 1918 to 1931.

## THE CANADIAN INDUSTRIAL FIELD

## Trade in Raw and Manufactured Products

Canada was not related to any great extent in manufacturing processes for some years after Confederation, consequently her imports consisted very largely of manufactured goods and her exports of raw and semi-manufactured products. Since the beginning of the twentieth century, however, a conspicuous change in the character of her imports and exports has developed, a large percentage of the imports consisting of raw and semi-manufactured products for use in Canada's fast-expanding manufacturing industry, and the exports consisting to a considerable degree of products which have undergone some processes of manufacture. From 1914 to 1931 the value of Canada's imports of raw materials increased from \$135,200,000 to \$216,500,000 or 60 per cent, while the domestic export increased from \$272,600,000 to \$305,200,000 or 12 per cent. At the same time the imports of fully manufactured goods increased from \$426,000,000 to \$621,400,000 or 46 per cent which percentage increase is small in comparison to that of the domestic exports of fully manufactured products which increased from \$118,500,000 to \$352,100,000 or 205 per cent. The trend in the values of imports and exports of raw materials and partly and fully manufactured products is shown in the following table:—

VALUE AND PROPORTION OF IMPORTS AND EXPORTS OF RAW MATERIALS  
AND PARTLY AND FULLY MANUFACTURED GOODS 1900-1931

(Values in Millions of Dollars)

	Raw Materials				Partly Manufactured Goods				Fully Manufactured Goods			
	Imports		Domestic Exports		Imports		Domestic Exports		Imports		Domestic Exports	
	Value	% of Total Imports	Value	% of Total Domestic Exports	Value	% of Total Imports	Value	% of Total Domestic Exports	Value	% of Total Imports	Value	% of Total Domestic Exports
Years ended												
June 30, 1900.....	43.0	24.9	70.1	41.5	18.3	10.6	29.9	17.7	111.4	64.5	68.9	40.8
1905.....	64.2	25.5	79.5	41.6	23.7	9.5	34.8	18.2	164.1	65.0	76.6	40.2
Years ended												
March 31, 1910.....	90.9	24.2	143.1	51.2	37.5	10.0	44.9	16.1	241.9	65.8	91.2	32.7
1914.....	135.2	21.8	272.6	63.2	57.6	9.3	43.7	10.1	426.3	68.9	115.3	26.7
1920.....	294.7	27.5	440.6	35.7	143.9	13.2	185.3	15.1	625.9	59.3	663.6	49.2
1921.....	310.3	24.9	524.1	44.2	151.4	11.7	193.6	16.6	778.5	63.4	471.4	39.2
1922.....	216.4	28.9	329.4	44.5	71.8	9.6	107.2	14.5	459.5	61.5	303.6	41.0
1923.....	228.0	28.4	416.3	44.7	77.8	9.7	150.9	16.2	496.7	61.9	364.2	39.1
1924.....	54.0	28.4	453.5	43.4	100.3	11.2	176.0	16.8	539.1	60.4	415.9	39.8
1925.....	220.9	27.7	477.5	44.7	85.7	10.8	161.4	15.1	490.3	61.5	430.2	40.2
1926.....	255.9	27.6	620.0	47.1	93.1	10.0	189.2	14.4	578.3	62.4	506.1	38.5
1927.....	263.9	25.6	578.4	46.2	104.7	10.1	183.3	14.6	662.3	64.3	490.4	39.2
1928.....	283.8	25.6	580.0	47.2	106.3	9.6	189.4	15.4	718.8	64.8	458.8	37.4
1929.....	290.5	23.0	661.4	48.5	101.2	8.0	195.1	14.3	874.0	69.0	507.2	37.2
1930.....	288.3	23.1	429.4	38.3	96.0	7.7	213.3	19.1	864.0	69.2	477.6	42.6
1931.....	216.5	23.9	305.2	38.2	68.8	7.6	142.4	17.8	621.4	68.5	352.1	44.0

**Balance of Trade**

There have been marked changes in Canada's total trade balances with the leading commercial countries of the world during the last two decades. In 1914 Canada had a favourable trade balance with Europe, Africa, and Oceania but an unfavourable trade balance with North and South America and Asia. In more recent years, however, she has also maintained a favourable trade balance with the latter continent. Canada also increased her number of favourable trade balances among the leading countries from 30 to 46 between 1914 and 1932, the outstanding change taking place in connection with European countries where the number increased from 7 to 16. The following table shows the trend of Canada's trade balances with the different continents between 1914 and 1932:

**CANADA'S TRADE BALANCES WITH THE CONTINENTS**

(Values in Thousands of Dollars)

Continent	Trade balances (fiscal years)					
	1914	1920	1929	1930	1931	1932
Europe.....	+ 65,032	+523,225	+358,861	+124,868	+ 87,127	+ 95,368
North America.....	-221,739	-305,697	-328,478	-286,685	-196,767	- 92,765
South America.....	- 4,994	- 4,495	+ 5,115	+ 1,899	- 5,658	- 8,348
Asia.....	- 8,118	- 13,458	+ 54,582	+ 31,988	+ 11,761	+ 9,755
Oceania.....	+ 2,603	+ 12,910	+ 15,073	+ 11,613	+ 5,690	+ 720
Africa.....	+ 3,459	+ 9,646	+ 18,064	+ 12,982	+ 8,172	+ 4,331
Total.....	-163,757	+222,131	+123,217	-103,335	- 89,675	+ 9,061

NOTE.—Favourable balance +, unfavourable balance —.

**Trade with Principal Countries**

Canada's foreign trade volume has undergone a very material change since 1890 both as to origin of imports and destination of exports. Prior to 1900 or even 1910, little progress was made in the trade with countries other than the United Kingdom and United States, but since that time that trade has substantially expanded, rising from 14 per cent of Canada's total in 1910 to 25 per cent in 1932. While the percentage of imports from countries other than the United Kingdom and United States increased from 15 to 21 between 1890 and 1932, more phenomenal was the percentage increase in domestic exports to these markets which rose from 19 to 29 per cent during the period. The following table shows the decennial trend of Canada's imports and exports with principal countries during the past 40 years:—

# THE CANADIAN INDUSTRIAL FIELD SUMMARY OF CANADA'S FOREIGN TRADE (Countries arranged in order of importance, 1932)

## IMPORTS

Countries	1890	1900	1910	1920	1930	1932
	\$	\$	\$	\$	\$	\$
United States.....	51,365,661	102,224,917	218,004,556	801,097,318	847,442,037	351,686,775
United Kingdom.....	43,277,009	44,280,041	95,337,058	126,362,631	189,179,138	186,371,779
British West Indies, including Bermuda	1,181,570	801,613	5,777,698	12,170,394	13,753,333	11,860,606
British East Indies	—	—	7,935,230	44,255	21,505,127	11,657,869
British Africa	—	—	3,576,184	16,236,412	13,170,242	7,238,948
British America	—	—	1,041,565	919,078	4,131,135	6,083,185
Canada	1,258,344	1,751,415	2,179,936	13,637,287	12,537,258	5,990,401
New Zealand	—	—	2,009,900	2,266,169	9,432,608	5,827,969
France	205,383	560,884	423,017	1,371,775	4,211,351	3,096,770
Germany	721,332	3,223,918	3,239,888	911,407	13,019,006	5,047,721
Italy	1,852	3,935	28,514	502,656	7,252,691	5,035,311
Japan	—	—	2,080,238	7,412,931	3,982,493	4,541,922
Switzerland	—	—	893,398	999,040	4,963,431	1,193,437
China	841,044	629,169	799,708	1,205,229	2,911,621	3,725,558
Sweden	316,523	529,176	2,603,858	7,758,551	7,314,840	3,687,517
Spain	—	173	41,580	5,072,408	7,492,128	3,515,589
Argentina	25	571,269	2,181,554	3,402,554	10,232,327	2,608,363
Belgium	—	—	185,853	714,306	3,676,604	2,606,430
Newfoundland	460,711	637,444	1,467,619	2,146,414	2,378,103	1,483,881
South Africa	—	—	1,019,775	1,528,298	2,784,059	1,476,630
New Zealand	—	—	775,365	3,494,600	16,282,719	1,080,230
Brazil	—	—	660,509	1,973,768	1,687,707	982,544
Cuba and Porto Rico	—	—	628,437	17,587,438	3,517,914	982,528
Sweden	—	—	208,147	360,353	2,259,409	879,476
Mexico	—	—	558,515	2,648,915	749,645	788,447
Hong Kong	—	—	243,231	3,208,836	1,259,088	660,939
Norway	—	—	172,642	461,848	1,104,935	548,998
San Francisco	—	—	845,228	10,675,287	1,776,772	522,884
Russia	—	24,636	345,297	14,496	909,525	18,001
Total 30 Countries	153,633,333	153,790,937	366,224,134	1,056,815,019	1,236,144,473	570,370,849
Total Imports	153,633,333	153,790,937	370,318,199	1,064,528,123	1,248,273,582	578,503,904
British Empire	47,863,080	111,782,703	178,336,027	890,192,096	252,703,704	147,811,993
Foreign Countries	66,041	42,007,996	288,585,496	890,192,096	995,569,878	430,691,911

## EXPORTS (DOMESTIC)

Countries	1890	1900	1910	1920	1930	1932
United States.....	56,118,488	57,996,488	104,199,675	464,028,183	515,049,763	235,186,674
United Kingdom.....	31,118,488	96,562,875	139,482,945	489,152,637	281,745,967	371,043,725
France	—	—	2,601,097	61,108,693	16,507,011	17,954,321
Japan	—	—	659,118	7,732,514	30,475,581	26,555,690
Belgium	—	—	1,840,156	28,463,855	21,692,838	11,036,437
Netherlands	—	—	1,376,807	5,653,218	15,944,469	13,502,157
Germany	—	—	2,065,768	610,528	25,343,661	10,405,256
British West Indies, including Bermuda	1,400	2,602,458	3,534,766	12,118,296	17,316,411	10,222,031
British Africa	—	—	2,349,159	9,825,526	13,803,171	9,173,946
St. Pierre and Miquelon	—	—	134,602	748,573	5,859,351	8,642,119
Newfoundland	—	—	3,806,962	16,175,443	12,178,391	6,601,852
Canada	—	—	1,219,189	6,665,805	16,527,939	5,908,133
Australia	—	—	3,561,075	11,415,623	16,322,771	5,887,982
Argentina	—	—	2,867,785	6,126,457	19,206,746	4,344,735
Italy	—	—	345,984	16,959,557	11,387,294	4,265,324
Denmark	—	—	435,053	2,938,026	4,108,701	3,875,680
New Zealand	—	—	887,058	6,987,008	19,166,488	3,724,225
British East Indies	—	—	58,180	6,762,259	10,716,596	3,440,907
Norway	—	—	487,147	4,798,299	3,674,988	3,324,772
Irish Free State	—	—	(b)	(b)	2,711,544	2,661,421
Greece	—	2,382	1,424	29,588,984	5,387,067	2,412,035
Sweden	380,696	81,044	111,672	4,449,105	4,678,037	2,385,789
Cuba and Porto Rico	1,008,301	1,119,251	2,194,118	7,819,450	5,123,516	2,087,860
Hong Kong	—	—	508,551	1,343,867	2,000,124	1,434,659
Mexico	—	—	895,934	4,825	2,583,440	1,366,947
Brazil	—	—	823,402	2,703,488	4,292,293	979,854
Spain	—	—	51,592	1,096,053	4,503,231	566,103
Dutch East Indies	—	—	2,370	1,492,775	2,279,871	507,258
Chile	—	—	242,717	890,960	2,280,003	405,359
Russia	—	—	598,435	1,492,041	3,738,401	55,197
Total 30 Countries	84,600,000	103,462,544	277,371,741	1,209,558,048	1,096,605,622	565,458,448
Total Exports	85,118,488	103,462,544	279,247,551	1,239,492,098	1,120,258,302	576,344,302
British Empire	44,669,523	103,462,544	154,937,457	561,788,003	379,650,208	278,956,387
Foreign Countries	40,448,965	40,000,000	124,310,094	677,704,095	740,608,034	357,387,915

(a) Included with Sweden.

(b) Included with United Kingdom.



## Principal Imports and Exports

A marked change has taken place in the character of the commodities which have comprised Canada's principal imports and exports during the past forty years. Commodities which occupied leading positions in Canada's foreign trade in 1890 have, due to economic changes in the industrial life of the country, materially changed in their relative importance to commodities which today constitute the principal imports and exports. The following table shows the decennial trend of the values of thirty of Canada's principal imports and exports since 1890:—

## LEADING COMMODITIES IN CANADA'S FOREIGN TRADE

(Commodities arranged in order of importance, 1932)

## IMPORTS

Commodities	1890	1900	1910	1920	1930	1932
	\$	\$	\$	\$	\$	\$
Coal.....	8,013,156	11,012,223	27,516,678	60,072,629	56,812,418	35,501,362
Alcoholic beverages.....	1,695,161	1,938,112	4,459,566	9,135,536	45,026,487	25,929,880
Machinery.....	1,877,551	5,159,952	14,690,873	36,716,791	69,117,528	24,387,589
Crude petroleum.....	—	23,244	1,189,071	20,306,693	50,951,202	24,194,084
Fruits.....	2,400,851	3,133,407	8,316,462	33,463,270	34,277,882	22,476,232
Sugar and products.....	6,452,654	8,610,845	14,962,770	73,618,354	27,987,156	22,398,080
Rolling mill products.....	5,645,704	11,905,937	15,692,051	39,985,746	61,894,002	20,512,246
Electric apparatus.....	317,515	810,900	3,688,538	15,550,254	37,611,263	14,672,423
Petroleum, refined.....	690,283	830,025	2,326,681	10,566,692	25,180,476	13,786,435
Cotton goods.....	3,792,584	6,399,705	17,928,093	51,435,017	28,316,037	13,756,029
Automobile parts.....	—	—	269,586	12,674,823	35,746,929	13,541,825
Books and printed matter.....	1,404,583	1,588,432	4,127,179	11,228,018	18,130,779	12,609,325
Woolen goods, including carpets.....	10,900,600	9,427,575	20,767,010	45,545,127	32,632,927	11,848,325
Paper.....	1,208,683	1,378,749	4,567,810	9,949,574	14,764,904	8,825,141
Settlers' effects.....	1,810,217	3,065,410	10,273,428	10,181,034	11,181,203	8,262,445
Raw cotton.....	3,539,249	4,229,198	9,384,801	33,854,457	21,682,463	7,802,044
Flax, hemp and jute.....	1,416,217	3,551,037	5,340,312	15,923,836	14,995,198	7,671,578
Vegetable oil.....	612,671	826,882	1,862,265	15,973,417	12,244,151	7,644,017
Grain and grain products.....	3,034,049	8,298,884	7,806,665	9,086,073	25,082,671	7,585,738
Engines and boilers.....	188,759	778,364	2,019,558	12,997,757	15,146,437	7,210,249
Clay and products.....	948,876	1,593,255	3,418,844	6,371,567	12,256,769	7,195,457
Tea.....	3,073,643	3,604,027	5,347,854	8,336,163	10,694,379	7,125,314
Vegetables.....	337,859	625,749	1,751,265	5,722,600	11,040,765	6,746,722
Raw silk.....	193,529	277,708	393,011	3,090,845	8,360,968	6,499,154
Silk goods.....	2,654,505	3,880,535	5,590,829	31,341,944	19,606,589	6,404,808
Rubber and products.....	1,512,427	2,942,044	6,151,157	18,059,435	20,025,316	6,271,708
Leather.....	1,173,777	1,879,333	4,202,934	17,102,702	11,537,331	6,198,308
Wood, unmanufactured.....	1,444,727	3,775,240	8,324,585	14,112,391	15,348,150	5,755,866
Glass and glassware.....	1,268,314	1,658,694	2,932,104	6,926,459	10,453,706	5,744,616
Furs.....	1,058,001	2,106,441	5,768,075	12,877,520	11,953,949	5,070,008

## EXPORTS

Wheat.....	388,861	11,995,488	52,609,351	185,044,806	215,753,475	115,739,383
Newsprint paper.....	—	—	2,612,243	53,640,122	145,610,519	103,003,352
Wood pulp.....	168,180	1,816,016	5,204,597	41,383,482	44,704,958	27,684,782
Fish.....	8,099,674	10,564,688	15,179,015	40,687,172	34,767,739	23,594,230
Wheat flour.....	521,383	2,791,885	14,859,854	94,262,922	45,457,195	18,897,543
Planks and boards.....	17,637,308	22,015,990	33,100,387	75,216,193	49,446,887	18,766,452
Gold, raw.....	657,022	14,148,543	6,016,126	5,974,334	34,375,003	13,671,565
Copper bars, etc.....	—	—	—	541,338	48,181	13,057,733
Furs, raw.....	1,874,327	2,264,580	3,749,005	20,628,109	18,706,311	12,110,157
Nickel.....	—	1,040,498	3,320,054	9,039,221	25,034,975	12,109,400
Whiskey.....	25,383	396,671	1,010,657	1,504,132	25,856,136	11,622,256
Cheese.....	9,372,212	19,856,324	21,607,692	36,336,863	18,278,004	10,593,967
Barley.....	4,600,409	1,010,425	1,107,732	20,206,972	10,388,735	10,002,911
Pulpwood.....	80,005	902,772	6,076,628	8,454,803	13,860,209	8,196,144
Fruits (chiefly apples).....	1,073,890	3,305,662	5,492,197	8,347,549	9,593,484	7,507,040
Copper ore and blister.....	133,251	1,387,388	6,023,925	11,871,039	37,735,413	6,346,192
Vegetables.....	597,074	503,993	1,534,228	11,656,483	11,240,747	5,554,068
Zinc.....	—	—	—	950,082	8,366,712	5,261,647
Silver.....	201,615	1,354,053	15,009,937	14,255,601	11,569,855	5,160,528
Rubber tires.....	—	—	—	7,395,172	18,153,225	5,152,614
Meats.....	895,757	13,615,621	8,013,680	96,161,234	15,030,671	4,960,816
Oats.....	256,156	2,143,179	1,566,612	9,349,455	4,055,855	4,662,335
Asbestos, raw.....	444,159	490,909	1,886,613	8,767,856	12,074,065	4,628,117
Lead.....	2,000	688,691	529,422	1,193,144	10,637,887	4,441,562
Settlers' effects.....	818,001	1,095,536	2,274,005	7,631,498	6,304,199	3,970,005
Machinery.....	143,815	446,391	924,510	6,416,591	7,154,706	3,675,623
Automobiles.....	—	—	405,011	14,883,607	35,307,645	3,617,251
Cattle.....	6,949,417	8,704,523	10,792,156	46,064,631	13,119,462	3,634,784
Rubber footwear.....	—	—	129,618	1,750,967	9,986,392	3,611,517
Stone and products.....	949,158	575,749	955,636	3,531,916	6,909,442	3,254,864

### Domestic Trade

While the advantage of a Canadian location for the production of manufactured goods can, to a certain extent, be measured by the demand for Canadian products in foreign markets, the extent and value of the domestic market is, at least, equally as important to the prospective manufacturer. According to the inventory method of computing the country's wealth, namely, that of combining the total investments in agriculture, manufactures, dwellings, etc., there was a suggested or indicated per capita wealth in Canada in excess of \$3,100 in 1929. The grand total value of the productive activities of the gainfully employed population during that year was in excess of \$6,000,000,000 which, in conjunction with the indicated per capita wealth, suggests the purchasing power and consequent capacity for consumption by the Canadian population.

The total value of Canada's foreign trade in 1930 amounted to \$1,914,000,000 and comprised imports valued at \$1,009,000,000 and exports at \$905,000,000. While there are broadly indicated here opportunities for increased domestic production for the replacement of imports and for the possible participation in an already substantial export market, the total value of the foreign trade is substantially less than the value of the retail merchandising sales in that year amounting to \$2,904,000,000.

The distribution of commodities is largely accomplished through the wholesale and retail merchandising establishments, a mechanism which has been highly developed in Canada in recent years. The census of Canadian trading establishments taken in 1924 showed a capital investment there of \$1,580,000,000 and total purchases of commodities for re-sale amounting to \$2,300,000,000, over 50 per cent of which was for the requirements of the retail merchandising establishments. While information is not presently available that will enable a strict comparison on the basis between 1924 and 1930, an indication of the progress made in retail merchandising alone may be obtained from the increased sales in 1930, the value rising from \$1,642,000,000 in 1924 to \$2,904,000,000 in 1930, an increase of 77 per cent. The number of establishments increased from 60,000 to nearly 122,000, employees from 156,000 to 304,000 and wages from \$150,000,000 to \$309,000,000 during the same period. While this further indicates the progress of the retail business in Canada, the increased sales are specially indicative of the increasing demand for manufactured products and provide the prospective manufacturer with a very excellent gauge for measuring the possibilities of Canadian industrial expansion. The progress of retail merchandising in the four zones into which Canadian distribution may be logically and geographically divided is indicated in the following table:—

## PROGRESS IN RETAIL MERCHANDISING, 1924-1930

Zone	1924		1930	
	Number of stores	Sales	Number of stores	Sales
		\$		\$
GREAT LAKES-ST. LAWRENCE—				
Quebec.....	15,665	342,005,409	33,078	667,173,500
Ontario.....	21,802	646,992,751	42,388	1,112,733,300
Total for Zone.....	37,467	988,998,160	75,466	1,779,906,800
PRAIRIE PROVINCES—				
Manitoba.....	3,757	135,055,882	6,646	192,620,100
Saskatchewan.....	5,191	163,820,335	10,728	192,902,900
Alberta.....	3,970	101,440,086	8,420	184,257,000
Total for Zone.....	12,918	400,316,303	25,794	569,780,000
PACIFIC COAST—				
British Columbia and Yukon.....	4,028	130,619,622	9,346	251,185,100
Total for Zone.....	4,028	130,619,622	9,346	251,185,100
MARITIME—				
Prince Edward Island.....	374	6,626,694	794	13,556,700
Nova Scotia.....	3,114	59,912,740	6,183	104,140,900
New Brunswick.....	2,190	55,629,949	4,294	85,006,300
Total for Zone.....	5,678	122,169,383	11,271	202,703,900
Total for Canada.....	66,091	1,642,103,468	121,942	2,805,075,800

NOTE.—Totals for 1930 include sales and number of stores for Northwest Territories, but do not include retail sales by wholesalers, and by bakeries and dairies reported to Census of Industry, which in 1930 amounted to \$98,602,200.

Canada's retail trade, as dealt with by the Dominion Bureau of Statistics, embraces retail merchandising and service establishments. In the Bureau's most recent survey, that of 1931, the total sales from these sources for 1930 were found to be in excess of \$3,139,000,000, 92 per cent of which or \$2,805,000,000 was accounted for by the retail merchandising units.

The largest amount of trade was handled by the general merchandising group, which includes department stores and the larger general stores, numbering over 15,300, and which accounted for sales in excess of \$714,000,000 or 25.5 per cent of the total sales of the retail merchandising class. Next in importance was the food group with sales from over 41,800 stores in excess of \$609,000,000, to which when added the retail sales of bakeries and dairies reporting to the Census of Industry, provide a total of over \$690,000,000. Following in order of importance were the automotive, apparel and lumber groups with sales exceeding \$381,000,000, \$210,000,000 and \$165,000,000 respectively.

The numbers of stores and values of sales in the main groups of each of the two sections into which Canada's retail trade is divided is shown for the different Canadian distribution zones in the following table:—

## RETAIL TRADE IN CANADA—1930

## MERCHANDISING

	Great Lakes St. Lawrence		Prairie Provinces		Pacific Coast <sup>1</sup>		Maritime		Canada <sup>2</sup>	
	Number of stores	Sales \$ '000	Number of stores	Sales \$ '000	Number of stores	Sales \$ '000	Number of stores	Sales \$ '000	Number of stores	Sales \$ '000
Automotive .....	7,900	241,008	2,969	75,835	1,090	33,767	1,000	31,111	18,070	881,721
Food .....	28,114	442,347	5,678	78,635	8,430	47,779	3,886	46,475	11,832	609,432
General merchandise .....	8,157	385,439	4,113	197,743	1,029	94,822	1,913	63,834	15,342	711,050
Apparel .....	7,075	149,841	1,282	27,380	756	17,285	799	17,843	16,333	219,163
Lumber .....	3,039	96,898	2,316	13,723	375	12,101	279	7,529	3,913	105,729
Furniture .....	1,509	43,398	225	6,073	191	4,838	138	4,168	2,083	58,477
Restaurant .....	3,534	50,351	1,731	22,448	673	10,998	432	3,228	6,896	87,106
All other stores .....	15,517	370,625	7,450	112,899	1,943	58,371	1,984	36,431	26,913	578,510
Total .....	75,466	1,779,907	25,794	569,780	9,281	249,524	11,271	202,704	121,942	2,805,076
Retail sales by wholesalers .....	—	12,984	—	1,295	—	1,584	—	1,503	—	17,366
Retail sales reported to Census of Industry by bakeries and dairies .....	—	56,745	—	15,684	—	6,128	—	2,679	—	81,236
Total merchandising .....	—	1,849,636	—	586,759	—	257,236	—	206,886	—	2,903,678

<sup>1</sup> Does not include the Yukon Territory.<sup>2</sup> Includes the Yukon and Northwest Territories.



## RETAIL TRADE IN CANADA—1930—Concluded

## SERVICES

	Great Lakes St. Lawrence		Prairie Provinces		Pacific Coast <sup>1</sup>		Maritime		Canada <sup>2</sup>	
	Number of stores	Sales \$ '000	Number of stores	Sales \$ '000	Number of stores	Sales \$ '000	Number of stores	Sales \$ '000	Number of stores	Sales \$ '000
Amusements.....	1,674	34,042	1,014	11,105	277	5,511	264	3,598	3,229	54,256
Cartage and storage.....	1,342	17,380	761	4,844	205	2,377	149	1,313	2,457	25,914
Domestic service.....	3,144	26,813	945	6,240	531	4,617	271	1,808	4,895	39,493
Personal services.....	7,093	17,025	1,862	3,979	878	2,095	765	1,338	10,602	24,444
Photography.....	513	3,609	164	924	106	570	61	318	844	5,421
Repair.....	8,293	18,007	3,098	5,122	819	2,517	1,291	1,836	13,505	27,488
Transportation.....	1,864	16,928	331	3,332	198	3,195	132	616	2,228	24,168
All other establishments.....	2,001	25,900	737	4,873	330	3,078	263	1,069	3,334	34,931
Total services.....	25,624	159,704	8,912	40,419	3,344	23,960	3,196	11,896	41,094	236,115
Total retail trade.....	—	2,009,340	—	627,178	—	281,196	—	218,782	—	3,139,793

<sup>1</sup> Does not include the Yukon Territory.<sup>2</sup> Includes the Yukon and Northwest Territories.

## THE CANADIAN INDUSTRIAL FIELD

The more important outlets for retail merchandising in the Dominion, having sales exceeding \$50,000,000, are shown in the following table:—

	Number of establishments	Net sales (1930)
		\$
Department and general stores over \$100,000.....	373	399,407,900
Automobile dealers.....	2,366	245,830,100
Grocery stores.....	18,057	237,154,400
General stores with groceries.....	12,146	228,986,800
Grocery stores with meats.....	3,481	125,090,200
Coal and wood dealers.....	2,387	97,241,700
Drug stores.....	3,561	76,712,000
Lumber and building material dealers.....	1,811	73,601,600
Hardware stores.....	2,958	72,027,600
Garages.....	5,260	71,379,400
Meat markets.....	4,756	70,282,900
Restaurants.....	2,815	57,972,100
Meat markets with groceries.....	2,315	57,767,400
Filling stations.....	4,656	51,978,300

The Great Lakes-St. Lawrence zone, comprising Ontario and Quebec, accounted for retail sales, including those made by wholesalers, bakeries, and dairies, amounting to nearly \$1,850,000,000 or 64 per cent of the total retail sales made in Canada in 1930. The Prairie Provinces zone with sales valued at \$587,000,000 or 20 per cent of the total ranked second and was followed by the Pacific Coast and Maritimes zones with 9 and 7 per cent respectively. The following table contains information which will enable a ready comparison to be made in regard to the manufactures, retail sales and populations of the different provinces comprising the Canadian distribution zones:—

## POPULATION, MANUFACTURES, AND RETAIL SALES OF DISTRIBUTION ZONES

Zone	Popu-lation	Value of		Percentage of			Per capita value of	
		Manu-factures	Retail sales <sup>1</sup>	Popu-lation	Manu-fac-tures	Retail sales	Manu-fac-tures	Retail sales
		\$ '000	\$ '000				\$	\$
GREAT LAKES-ST. LAWRENCE.....	6,305,938	2,735,306	1,849,636	60.8	79.8	63.1	434	293
Quebec.....	2,874,255	1,022,281	686,675	27.7	29.8	23.6	356	239
Ontario.....	3,431,683	1,713,025	1,162,961	33.1	50.0	40.1	499	339
PRAIRIE PROVINCES.....	2,353,529	299,017	586,759	22.7	8.7	20.2	127	250
Manitoba.....	700,139	142,425	199,956	6.8	4.1	6.9	203	285
Saskatchewan.....	921,785	62,277	196,841	8.9	1.8	6.8	68	214
Alberta.....	731,605	94,315	189,962	7.0	2.8	6.5	129	260
PACIFIC COAST.....	698,403							
British Columbia.....	694,263	241,122	259,897	6.7	7.0	8.9	345	372
Yukon.....	4,230							
MARITIME.....	1,009,103	153,526	206,886	9.7	4.5	7.1	152	205
Prince Edward Island.....	88,038	4,255	13,816	0.9	0.1	0.5	48	157
Nova Scotia.....	512,846	85,803	106,432	4.9	2.5	3.6	167	208
New Brunswick.....	408,219	63,468	86,638	3.9	1.9	3.0	156	212
Total (including N.W.T.).....	10,374,196	3,428,971	2,903,678	100.0	100.0	100.0	331	280

<sup>1</sup> Includes retail sales by wholesalers, bakeries and dairies.

The sales in each of the principal outlets into which retail merchandising may be broadly divided are shown for each of the provinces in the following table.

# RETAIL SALES OF PRINCIPAL MERCHANDISING OUTLETS BY PROVINCES AND TERRITORIES

Kinds of stores	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Yukon and Northwest Territories	Canada
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>AUTOMOTIVE—</b>											
Automobiles, accessories, etc.	1,360,200	13,323,300	8,738,000	45,058,200	112,136,600	13,520,200	15,482,700	23,092,100	22,132,800	—	255,024,000
Filling stations.....	242,200	1,732,300	1,498,000	8,622,900	28,016,900	2,835,700	3,566,900	2,475,700	2,987,700	—	51,978,300
Garages, etc.	175,000	2,497,000	1,431,600	16,724,200	28,298,800	3,890,100	4,530,800	6,107,500	7,879,700	—	71,534,700
<b>FOOD—</b>											
Bakeries and delicatessens.....	5,900	141,600	147,800	3,513,200	5,823,900	343,100	433,300	293,000	1,782,700	1,200	12,485,700
Confectionery.....	106,700	1,845,100	926,800	19,125,600	15,804,400	3,430,000	1,301,500	2,468,100	4,638,700	100	49,647,000
Dairy products, etc.	1,500	512,500	261,400	16,675,600	12,597,000	322,900	229,300	771,900	1,335,800	—	32,707,900
Fruits and vegetables.....	120,000	108,300	102,400	3,155,700	8,149,500	373,500	336,600	407,400	1,553,400	—	14,307,800
Groceries, etc.	1,463,000	16,622,700	10,552,900	102,407,600	157,717,300	17,032,900	16,608,100	15,599,100	24,092,600	115,400	362,244,600
Meat markets, etc.	458,000	4,151,000	2,265,300	40,948,300	50,034,300	4,777,400	5,781,700	7,414,800	12,141,700	77,800	128,050,300
Fish markets.....	8,800	378,900	143,800	1,641,600	1,534,500	4,500	91,600	267,200	606,100	1,500	4,678,500
<b>GENERAL MERCHANDISE—</b>											
Dry goods.....	4,600	1,271,100	1,348,300	10,839,200	10,051,800	289,000	475,200	651,400	1,842,500	9,000	26,782,100
General, departmental, etc.	6,272,700	25,221,100	29,730,600	136,261,600	228,286,200	81,540,000	61,284,600	53,502,600	62,539,700	2,634,800	687,273,900
<b>APPAREL—</b>											
Men's clothing, etc.	250,200	5,172,200	3,546,600	26,967,100	43,125,600	4,406,300	4,520,900	5,114,000	7,916,100	—	101,507,900
Women's and children's clothing, etc.	42,100	1,599,200	1,039,600	13,142,200	25,306,700	2,274,200	1,916,000	2,896,600	5,190,700	—	33,347,300
Millinery.....	9,100	248,300	168,800	2,662,900	2,767,000	317,600	147,400	219,100	251,700	—	6,791,900
Boots and shoes.....	222,500	1,463,500	937,900	10,517,700	16,375,300	1,365,400	912,300	1,426,900	3,121,700	—	36,343,200
Furs.....	—	223,900	130,100	4,517,300	4,459,000	1,225,100	359,100	288,400	865,100	—	12,068,000
<b>LUMBER AND BUILDING—</b>											
Lumber and builders' supplies.....	197,400	1,188,300	1,146,400	12,123,400	26,092,700	7,152,600	12,781,300	7,300,800	6,266,300	16,800	74,266,000
Electrical supplies, etc.	—	90,400	32,900	1,280,400	1,923,800	189,500	71,000	—	249,000	—	3,827,000
Hardware, plumbing, etc.	165,600	2,820,100	1,912,400	17,000,300	34,804,500	4,343,600	8,648,500	7,741,200	4,892,800	60,000	82,389,000
Paint, glass, etc.	—	142,600	182,700	913,400	2,789,100	188,100	192,800	148,900	695,800	—	5,253,400
<b>FURNITURE, ETC.—</b>											
Furniture.....	—	1,550,400	1,635,700	12,964,800	14,424,600	613,000	939,200	2,173,300	2,452,500	—	36,695,000
House furnishings.....	31,000	562,700	361,000	5,670,000	8,841,900	814,900	698,400	609,000	2,220,000	—	19,878,900
China and glassware.....	13,100	24,000	48,700	305,000	1,192,300	60,000	40,000	125,000	95,000	—	1,903,100
<b>RESTAURANTS, ETC.</b>	186,500	1,820,100	1,221,500	19,768,200	30,583,200	6,143,800	7,079,400	9,224,900	10,997,700	80,900	87,106,200
<b>OTHER STORES—</b>											
Books and stationery.....	—	476,900	334,000	2,229,500	4,714,900	845,000	416,100	875,300	719,000	—	10,610,700
Coal and wood (and ice).....	476,900	3,777,100	2,878,600	21,620,800	50,941,100	8,814,800	4,533,700	1,016,400	5,846,800	16,200	99,922,400
Drugs, etc.	356,800	3,000,000	2,362,100	15,146,400	34,860,700	4,284,100	4,942,700	5,305,500	6,419,500	31,800	76,712,600
Flour and feed.....	227,400	1,040,400	1,003,600	6,393,600	10,262,500	917,900	1,138,100	769,200	11,356,100	—	33,108,800
Farm implements, etc.	158,700	346,300	627,800	4,600,600	6,975,000	4,290,300	14,208,400	11,435,200	2,988,300	—	35,611,500
Florists.....	—	166,000	202,400	1,938,700	4,753,500	616,200	275,000	498,900	2,700,600	—	9,221,300
Jewellery.....	91,800	883,700	513,300	8,391,200	12,163,900	1,905,300	1,170,200	1,376,200	2,709,000	18,900	29,224,400
Leather goods, saddlery, etc.	3,900	143,800	—	1,020,500	1,098,600	196,300	333,000	348,300	180,200	—	3,933,600
Musical and musical instruments.....	85,700	1,025,900	442,400	9,126,100	15,059,400	1,897,400	1,977,000	2,003,000	3,504,800	—	35,191,700
Office supplies, typewriters, etc.	—	582,100	293,300	4,383,200	8,380,900	1,585,700	883,500	775,600	1,249,400	—	18,133,700
Instruments, scientific, etc.	—	—	—	535,600	1,322,900	—	—	—	68,100	—	1,926,600
Seeds, etc.	—	166,400	—	582,400	1,662,000	276,900	90,200	120,800	217,400	—	3,116,000
Sporting goods, etc.	—	—	54,900	839,400	1,629,000	—	—	—	3,596,700	—	3,596,700
Tobacco, etc.	28,900	854,500	622,000	7,833,900	15,263,100	1,055,500	975,500	1,202,000	2,709,600	—	30,544,900
<b>SECOND HAND AND JUNK.....</b>	—	144,700	86,300	2,882,000	4,526,900	1,114,900	335,700	699,800	1,321,000	—	11,114,300
<b>Totals, All Stores.....</b>	<b>13,556,700</b>	<b>104,140,900</b>	<b>85,006,300</b>	<b>667,173,500</b>	<b>1,112,733,300</b>	<b>192,620,100</b>	<b>192,902,900</b>	<b>184,257,000</b>	<b>249,523,600</b>	<b>3,161,500</b>	<b>2,805,075,800</b>
<b>Retail sales by wholesalers.....</b>	<b>76,900</b>	<b>653,300</b>	<b>772,500</b>	<b>6,108,000</b>	<b>6,876,100</b>	<b>471,600</b>	<b>175,200</b>	<b>648,100</b>	<b>1,584,700</b>	<b>—</b>	<b>17,366,400</b>
<b>Retail sales reported to Census of Industry by bakeries and dairies.....</b>	<b>182,900</b>	<b>1,637,300</b>	<b>858,700</b>	<b>13,393,600</b>	<b>43,351,700</b>	<b>6,864,400</b>	<b>3,763,100</b>	<b>5,056,400</b>	<b>6,127,700</b>	<b>—</b>	<b>81,215,800</b>
<b>GRAND TOTAL.....</b>	<b>13,816,500</b>	<b>106,431,500</b>	<b>86,637,500</b>	<b>686,675,100</b>	<b>1,162,961,100</b>	<b>199,956,100</b>	<b>196,841,200</b>	<b>189,961,500</b>	<b>257,236,000</b>	<b>3,161,500</b>	<b>2,903,678,800</b>





Commodities valued at over \$1,750,000,000 or 63 per cent of Canada's retail merchandising sales in 1930 were distributed through the retail stores in 61 of the urban centres of the Dominion having populations in excess of 10,000.

The following table shows the number of stores, retail sales, and populations in Canada's urban centres with population of 10,000 and over.

SALES BY RETAIL STORES IN URBAN CENTRES WITH POPULATION OF  
10,000 OR OVER

Zone and Province	Urban centre	Number of stores	Sales  \$	Popu- lation
GREAT LAKES-ST. LAWRENCE— Ontario.....	Toronto.....	8,769	369,861,300	631,207
	Hamilton.....	2,005	63,068,300	155,547
	Ottawa.....	1,501	56,875,600	126,872
	Border Cities.....	1,177	34,447,700	98,179
	London.....	994	31,857,900	71,148
	Brantford.....	425	13,479,600	30,107
	Kitchener.....	392	13,198,400	30,793
	St. Catharines.....	398	13,177,200	24,753
	Kingston.....	332	10,949,800	23,439
	Peterborough.....	348	10,789,500	22,327
	Sudbury.....	233	9,635,900	18,518
	Niagara Falls.....	305	9,229,100	19,046
	Guelph.....	296	8,828,800	21,075
	Sault Ste. Marie.....	319	8,661,600	23,082
	Fort William.....	298	8,153,900	26,277
	Port Arthur.....	213	7,842,400	19,818
	Oshawa.....	268	7,671,100	23,439
	Chatham.....	259	7,596,300	14,569
	Belleville.....	224	7,263,100	13,790
	Sarnia.....	226	6,776,300	18,191
	St. Thomas.....	253	6,555,800	15,430
	Stratford.....	234	6,480,500	17,742
	North Bay.....	197	6,435,700	15,528
	Welland.....	190	5,285,400	10,709
	Galt.....	220	5,241,800	14,006
	Owen Sound.....	216	5,132,500	12,839
	Woodstock.....	183	5,132,200	11,395
	Timmins.....	135	4,539,800	14,200
	Cornwall.....	201	4,324,400	11,126
Quebec.....	Montreal.....	13,038	410,594,200	975,161
	Quebec.....	1,614	40,143,900	130,594
	Three Rivers.....	423	9,899,300	35,450
	Sherbrooke.....	366	9,545,100	28,933
	Hull.....	402	5,999,900	29,433
	St. Hyacinthe.....	198	4,263,200	13,448
	Valleyfield.....	142	3,914,700	11,411
	St. Jean.....	168	3,361,200	11,256
	Shawinigan Falls.....	158	3,132,100	15,345
	Joliette.....	160	2,708,400	10,765
	Chicoutimi.....	116	2,560,700	11,877
	Levis.....	125	2,516,300	11,724
	Granby.....	121	2,112,900	10,587
	Thetford Mines.....	104	1,906,000	10,701

### SALES BY RETAIL STORES IN URBAN CENTRES WITH POPULATION OF 10,000 OR OVER—Concluded

Zone and Province	Urban centre	Number of stores	Sales	Population
			\$	
PRAIRIE PROVINCES—				
	Manitoba.....			
	Winnipeg.....	2,456	128,563,600	218,785
	Brandon.....	215	7,649,100	17,082
	St. Boniface.....	105	1,826,300	16,305
Saskatchewan.....				
	Regina.....	496	30,172,500	53,209
	Saskatoon.....	492	25,520,300	43,291
	Moose Jaw.....	275	9,014,800	21,299
Alberta.....				
	Calgary.....	1,008	44,756,600	83,761
	Edmonton.....	947	33,722,500	79,197
	Lethbridge.....	196	8,121,500	13,489
	Medicine Hat.....	140	4,487,700	10,300
PACIFIC COAST—				
British Columbia.....				
	Vancouver.....	3,602	119,406,600	246,593
	Victoria.....	733	26,624,900	39,082
	New Westminster....	270	9,714,400	17,524
MARITIME—				
Prince Edward Island.....				
	Charlottetown.....	205	4,967,200	12,361
Nova Scotia.....				
	Halifax.....	865	30,825,000	59,275
	Sydney.....	303	7,008,700	23,089
	Glace Bay.....	208	3,467,700	20,706
New Brunswick.....	Saint John.....	803	21,364,600	47,514

#### Operation of Canada's Retail Merchandising Business

Canada's retail merchandising business may be classified according to the nature of the control or type of operation. From information collected through the 1931 census by the Dominion Bureau of Statistics, the following table has been prepared to show the number of stores and value of sales in each of such classes, as well as the percentage of which each class contributed to the total value of sales by retail stores in Canada in 1930:—

#### TYPES OF OPERATION FOR RETAIL MERCHANDISING IN CANADA

	Number of stores	Number of employees	Salaries and wages	Net sales	Percentage of total
Single store independents.....	102,514	210,633	209,737,600	1,891,472,200	67.4
Single stores (in voluntary chains).....	4,514	9,076	7,529,500	114,788,000	4.1
Two-store multiples.....	3,404	15,753	19,044,400	151,187,100	5.4
Three-store multiples.....	1,233	7,413	8,572,800	65,932,200	2.4
Local chains (4 stores and over).....	1,001	5,643	6,189,800	50,942,800	1.8
Sectional and national chains.....	9,276	55,936	57,557,500	530,753,500	18.9
Total.....	121,942	304,454	308,631,600	2,805,075,800	100.0

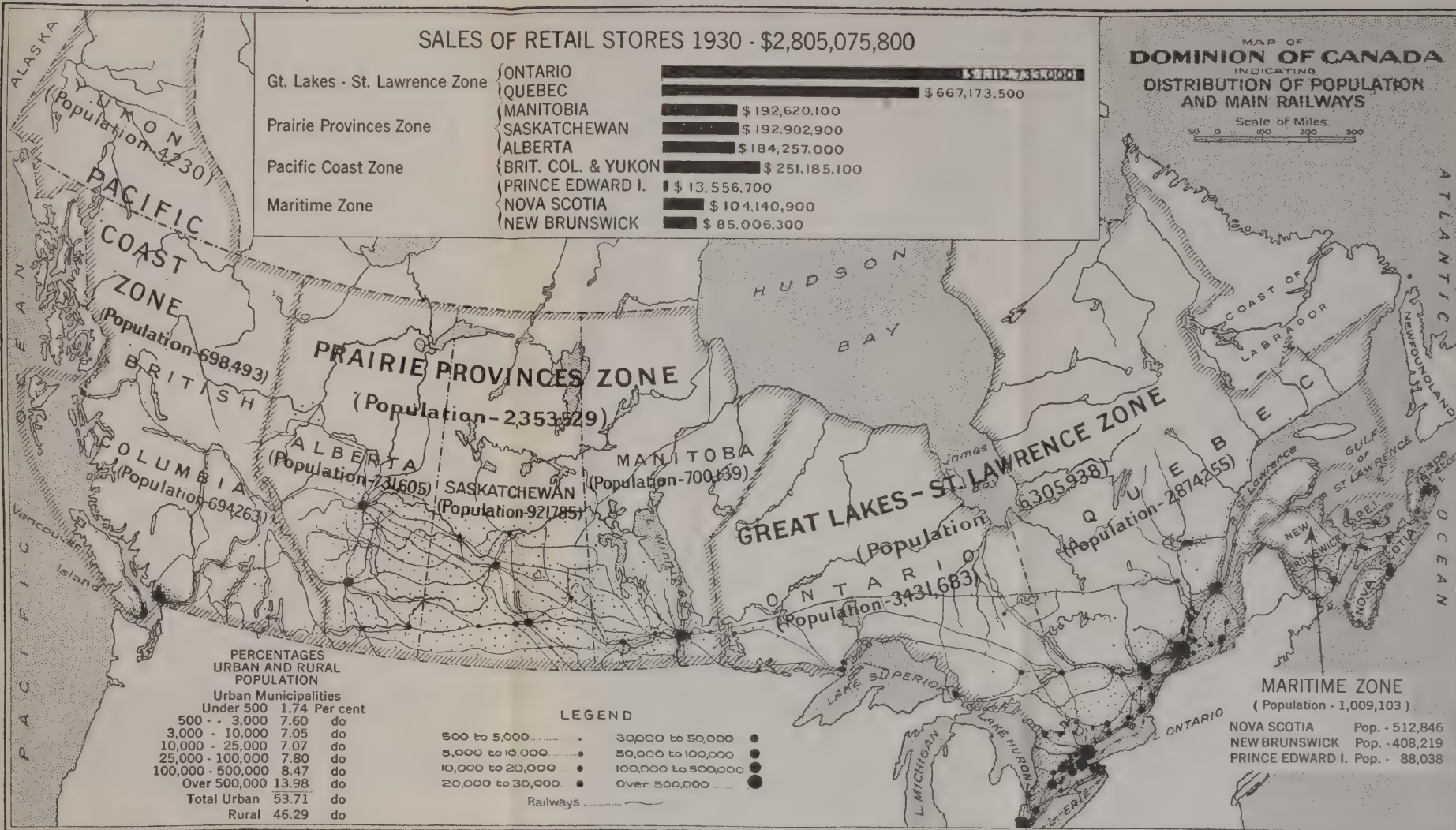
(a) Thirty different organizations of this type were reported.

# SALES OF RETAIL STORES 1930 - \$2,805,075,800

Gt. Lakes - St. Lawrence Zone	ONTARIO	\$ 667,173,500
	QUEBEC	\$ 667,173,500
Prairie Provinces Zone	MANITOBA	\$ 192,620,100
	SASKATCHEWAN	\$ 192,902,900
	ALBERTA	\$ 184,257,000
Pacific Coast Zone	BRIT. COL. & YUKON	\$ 251,185,100
	PRINCE EDWARD I.	\$ 13,556,700
Maritime Zone	NOVA SCOTIA	\$ 104,140,900
	NEW BRUNSWICK	\$ 85,006,300

## MAP OF DOMINION OF CANADA INDICATING DISTRIBUTION OF POPULATION AND MAIN RAILWAYS

Scale of Miles  
50 100 200 300







## Chain Store Merchandising

While retail merchandising in Canada was at one time largely in the hands of single store independents which, in 1930, accounted for 67·4 per cent of the sales made by retail stores, chain store merchandising has, in recent years, enjoyed a remarkable expansion. In 1930 those of a sectional, national or local nature numbered 10,277 units and accounted for sales amounting to nearly \$582,000,000 or 24 per cent of the total sales made by the retail stores of the Dominion. Coincident with the growth of chain stores proper was the development of so-called voluntary chains composed of groups of independently owned stores, combined for the purpose of buying and advertising, over 4,500 of such units operating in 1930 with sales valued at \$115,000,000.

According to the information presently available, the chain stores identified with the distribution of groceries and meats are well in the lead among the retail classes associated with the chain store method of retail merchandising. Combining the sectional, national, local and voluntary single store independents, the sales in 1930 from the 4,957 chain stores selling these commodities amounted to nearly \$195,000,000 or 28 per cent of the total sales of all chain stores in Canada. Following in order of importance were the filling stations, restaurant, drug and shoe store chains. While information is not presently available that will show the value of sales of all types of chain stores operating in Canada in 1930, the relative importance of some of the leading classes may be gauged from the following table which shows for each class the number of units in the voluntary, local, and sectional and national chains together with the total values of their sales and the percentages which such totals bear to the combined sales of similar commodities in all retail stores throughout Canada.

## SALES OF PRINCIPAL CHAINS OF CANADIAN RETAIL MERCHANDISING STORES

Type	Voluntary chains	Local chains (4 stores or over)	Sectional and national chains	Total	Percentage of Canada's total sales of similar commodities
Grocery stores.....No.	1,983	202	919	3,104	
Net sales	39,520,200	9,388,600	51,377,500	100,286,300	42·29
Grocery and meat stores.....No.	793	65	995	1,853	
Net sales	27,493,800	4,319,300	62,606,800	94,419,900	39·66
Filling stations.....No.	—	47	702	749	
Net sales	—	1,126,900	15,374,500	16,501,400	31·74
Restaurants.....No.	6	47	226	279	
Net sales	82,000	3,312,600	12,490,600	15,885,200	28·36
Drug stores.....No.	26	122	175	323	
Net sales	654,700	4,538,900	10,123,300	15,316,900	17·97
Shoe stores.....No.	76	46	161	283	
Net sales	2,787,200	1,373,100	6,645,300	10,805,600	29·64
Women's wear stores.....No.	—	112	1,016	1,128	
Net sales	—	703,700	6,942,800	7,646,500	14·93
Total.....No.	2,884	641	4,194	7,719	
Net sales	70,537,900	24,763,100	165,560,800	260,861,800	

In addition to the types of chain stores shown in the foregoing table, chain store merchandising is associated with the retail distribution of many commodities including bakery products, men's furnishings, candy, novelties, furniture, hardware, radios and tobacco.

While all Canadian distribution zones have shared in the progress of chain store merchandising, the Great Lakes-St. Lawrence zone has experienced the greatest development, the sales in the chain stores of its constituent parts, the

provinces—Ontario and Quebec accounting for approximately 65 per cent of the total sales of chain stores in Canada in 1930. The relative position which chain store merchandising occupies in the different provinces is indicated in the following table.

SALES OF CHAIN STORES IN CANADA BY PROVINCES—1930

		Single stores in voluntary chains	Local chains (4 stores or over)	Sectional and national chains	Total
Prince Edward Island.....	No. of stores	—	—	17	17
	Sales, \$	—	—	651,400	651,400
Nova Scotia.....	No. of stores	76	30	238	344
	Sales, \$	2,206,500	700,700	17,713,400	20,620,600
New Brunswick.....	No. of stores	151	4	291	446
	Sales, \$	3,603,500	Not available	13,244,700	16,848,200 <sup>1</sup>
Quebec.....	No. of stores	1,560	420	1,457	3,437
	Sales, \$	11,470,000	21,610,500	10,660,000	167,074,600
Ontario.....	No. of stores	1,900	299	3,416	4,942
	Sales, \$	10,000,000	19,000,000	10,000,000	273,807,900
Manitoba.....	No. of stores	180	81	180	825
	Sales, \$	6,000,000	2,000,000	1,000,000	30,944,200
Saskatchewan.....	No. of stores	117	11	1,256	2,387
	Sales, \$	9,886,000	800,000	28,690,000	49,109,600
Alberta.....	No. of stores	300	36	907	1,298
	Sales, \$	8,000,000	1,000,000	28,000,000	38,656,600
British Columbia.....	No. of stores	119	132	742	993
	Sales, \$	2,736,100	4,512,500	48,190,900	55,439,500
Total for Canada.....	No. of stores	4,514	1,001 <sup>2</sup>	9,276 <sup>3</sup>	14,791
	Sales, \$	114,788,000	50,942,800	530,753,500	696,484,300

<sup>1</sup> Does not include sales of local chains (4 stores or over).

<sup>2</sup> Includes New Brunswick, the Yukon and Northwest Territories.

<sup>3</sup> Includes Branch stores not considered as chains in the provincial summaries.

Further statistical information in regard to Canada's retail trade may be obtained on application to the Dominion Bureau of Statistics at Ottawa.

### The Commercial Intelligence Service

To assist Canadian manufacturers in developing markets for their products in other countries there was established some thirty years ago, in the Department of Trade and Commerce of the Government of Canada, a Commercial Intelligence Service having two main divisions; an administrative headquarters at Ottawa and an external service of Trade Commissioners and Trade Agents throughout the world.

At the headquarters in Ottawa machinery exists for dealing with trade enquiries, and the collection and dissemination of data with regard to foreign tariffs and foreign importers. "The Commercial Intelligence Journal" is a weekly issued by the Service, wherein are published reports of Trade Commissioners upon market opportunities and other subjects of interest to Canadian manufacturers concerned with the development of export trade.

Canadian Trade Commissioners are now stationed at thirty-one strategic commercial centres in other countries and there are many evidences that the services they render cannot be considered apart from the development which has taken place in the growth of Canadian export trade. The functions of Trade Commissioners are to assist exporters by reporting opportunities for the sale of Canadian products abroad, to establish contacts between the Canadian exporter and the foreign importer and to assist in subsequent negotiations, with a single view to developing permanent markets for Canadian products. Trade

Commissioners assist manufacturers and exporters of Canadian products by supplying the fullest information desired regarding any problem which has a bearing upon, or is related to, the development of export trade.

The Canadian Trade Commissioner in a foreign country is also in a position to co-operate with industrialists considering the establishments of a branch factory in Canada. He can supply most of the information necessary to a preliminary consideration of the problem.

There follows a list of the addresses of all Canadian Trade Commissioners' offices by countries:—

#### ARGENTINE REPUBLIC

B. Mitre 430, Buenos Aires (1). (Territory includes Uruguay.) Cable Address, Canadian.

#### AUSTRALIA

Address for letters—Box 196C, G.P.O., Melbourne. Office—Safe Deposit Building, Melbourne. Cable Address, Canadian. Commercial Agent: The Royal Exchange, Sydney, N.S.W.

#### BELGIUM

98 Boulevard Adolphe Max, Brussels. Cable Address, Canadian.

#### BRAZIL

Address for letters—Caixa Postal 2164, Rio de Janeiro. Office—Ed. Da "A Noite," Sala 802, Praca Maua. Cable Address, Canadian.

#### BRITISH WEST INDIES

Trinidad: Address for letters—P.O. Box 125, Port of Spain. Office—Colonial Bank Building, Port of Spain. (Territory includes Barbados, Windward and Leeward Islands, and British Guiana.) Cable Address, Canadian.

Jamaica: P.O. Box 225, Kingston. Office—Canadian Bank of Commerce Chambers, Kingston. (Territory—Jamaica, Hayti, the Bahamas, and British Honduras.) Cable Address, Canadian.

#### CHINA

Shanghai: Address for letters—P.O. Box 264, Shanghai. Office—Ewo Building, 27 The Bund, Shanghai. Cable Address, Canadian.

Tientsin: Address for letters—Hong Kong and Shanghai Banking Corporation Building, Tientsin. (Territory covers North China and Manchuria.) Cable Address, Canadian.

#### CUBA

Address for letters—Apartado 1945, Havana. Office—Royal Bank of Canada Building, Calle Aguiar 75, Havana. (Territory includes San Domingo and Puerto Rico.) Cable Address, Canadian.

#### EGYPT

Address for letters—P.O. Box 1770, Cairo. Office—22 Shari Kasr el Nil, Cairo. (Territory includes the Sudan, Palestine, Cyprus, Iraq, Syria and Persia.) Cable Address, Canadian.

## THE CANADIAN INDUSTRIAL FIELD

## FRANCE

3 rue Scribe, Paris (9). (Territory includes French Colonies in North Africa.)  
Cable Address, Cancomac.

## GERMANY

Mont Lebergstrasse 31, Hamburg. (Territory covers Germany—except the Rhine Valley, Czechoslovakia, Austria, Poland, Lithuania, Latvia, and Esthonia.) Cable Address, Canadian.

## GREECE

1 Corai Street, Athens. (Territory includes Turkey.) Cable Address, Canadian.

## HONGKONG

Address for letters—P.O. Box 80, Hongkong. Office—Gloucester Building, Hongkong. (Territory includes South China, the Philippines, British North Borneo, and Indo-China.) Cable Address, Canadian.

## INDIA AND CEYLON

Address for letters—P.O. Box 2003, Calcutta. Office—8 Esplanade Mansions, Government Place East, Calcutta. Cable Address, Canadian.

## IRISH FREE STATE AND NORTHERN IRELAND

66 Upper O'Connell Street, Dublin, Irish Free State (cable address, Canadian); and 44 Ann Street, Belfast, Northern Ireland (cable address, Adanac).

## ITALY

Via Manzoni Nr. 5—Milan (102). (Territory includes Spain, Portugal, Gibraltar, Canary Islands, Malta, Italian Colonies in Africa, Albania, and Yugoslavia.) Cable Address, Canadian.

## JAPAN

Tokyo: Commercial Secretary. Address for letters—P.O. Box F101, Tokyo Central. Office—Imperial Life Assurance Building, Marunouchi, Tokyo. Cable Address, Canadian.

Kobe: Address for letters—P.O. Box 239, Kobe. Office—399 Crescent Building, 72 Kyomachi, Kobe. Cable Address, Canadian.

## MEXICO

Address for letters—Apartado Num. 126-Bis, Mexico City. Office—Edificio Banco de Londres y Mexico, Num. 30, Mexico City. (Territory includes Guatemala, Honduras, and Salvador.) Cable Address, Cancoma.

## NETHERLANDS

Beursplein 26B, Rotterdam. (Territory includes the Rhine Valley and Switzerland.) Cable Address, Canadian.

## NETHERLANDS EAST INDIES

Address for letters: P.O. Box 84, Batavia, Java. Office—Chartered Bank Building, Melacca St., Batavia, Java. (Territory includes Straits Settlements, Federated Malay States, and Siam.) Cable Address, Canadian.



## NEW ZEALAND

Address for letters—P.O. Box 33, Auckland. Office—Yorkshire House, Shortland Street, Auckland. (Territory includes Fiji and Western Samoa.) Cable Address, Canadian.

## NORWAY

Jernbanetorvet 4, Oslo. (Territory includes Sweden, Denmark, and Finland.) Cable Address, Canadian.

## PANAMA

Address for letters: P.O. Box 222, Panama City. Office—Royal Bank of Canada Building, Santa Ana Plaza, Panama City. (Territory includes the Canal Zone Venezuela, Colombia, Nicaragua and Costa Rica.) Cable Address, Canadian.

## PERU

Address for letters—Casilla 1212, Lima. Office—Calle Coca, 478, Lima. (Territory includes Bolivia, Ecuador, and Chile.) Cable Address, Canadian.

## SOUTH AFRICA

Address for letters—P.O. Box 683, Cape Town. Office—Cleghorn & Harris Building, Alderley Street, Cape Town. (Territory includes Southwestern Africa, the Rhodesias, Nyasaland, Tanganyika Territory, and Kenya Colony.) Cable Address, Cantracom.

## UNITED KINGDOM

London: Chief Canadian Trade Commissioner in the United Kingdom, Canada House, Trafalgar Square, S.W. 1. (Territory covers Home Counties, Southeastern Counties and East Anglia.) Cable Address, Sleighing, London.

London: Fruit Trade Commissioner, Walter House, Bedford Street, Strand, W.C. 2. Cable Address, Canfrucum. (Territory—for fresh fruit only—covers United Kingdom, Norway, Denmark, Sweden, France, Holland, Belgium, Germany, and Spain.)

London: Animal Products Trade Commissioner, Canada House, Trafalgar Square, S.W. 1. Cable Address, Agrilson.

Liverpool: Century Buildings, 31 North John Street. (Territory covers North of England, Lincolnshire, North Midlands, and North Wales.)

Bristol: Northcliffe House, Colston Avenue. (Territory covers West of England, South Wales, and South Midlands.) Cable Address, Canadian.

Glasgow: 211 St. Vincent Street. Cable Address, Cantracom.

## UNITED STATES

New York City: 25 Broadway. (Territory includes Bermuda.) Cable Address, Cantracom.

NOTE.—Bentley's Second Phrase Code is used by Canadian Trade Commissioners.

## CHAPTER III

### BRITISH EMPIRE TARIFF PREFERENCES ON CANADIAN GOODS

The tariff preferences existing throughout the British Empire favouring imports of Canadian goods as compared with those of non-British origin aid very substantially the production and manufacture of goods in Canada for export trade.

The year 1932 witnessed a notable expansion of these intra-Imperial preferences. In this regard may be mentioned adoption by the United Kingdom of a new and comprehensive tariff on foreign goods, establishment in several British colonies of *Empire preference* for the first time, and reciprocal trade agreements concluded between various units of the Empire at the Imperial Economic Conference at Ottawa.

This chapter is designed to give information regarding the scope of these preferential duties as affecting Canadian exports to Empire markets.

The information is taken from the records available in the Department of Trade and Commerce at the end of June, 1933. As the world's tariffs, taken as a whole, are constantly changing it would not be practicable to guarantee a compilation of customs duties involving many countries to be entirely up to date in all details. Moreover, the material on all the subjects treated, namely, tariffs, valuation of goods for duty purposes, and Empire content regulations, is much condensed. Requests for more specific or later information concerning these subjects may be addressed at any time to the Foreign Tariffs Division, Department of Trade and Commerce, Ottawa.

### EMPIRE TARIFF PREFERENCES

#### The United Kingdom\*

The United Kingdom Finance Act of July 31, 1919, instituted Imperial preference within the scope of the limited tariff of that time. The entire tariff in 1919, however, comprised only about a score of articles. The tariff and consequent preferences expanded from year to year, but it was not until the Abnormal Importations (Customs Duties) Act of November 20, 1931, enacted for six months, giving extensive powers for taxing imports that any considerable number of articles were subjected to import duty. Under this measure three orders were issued applying 50 per cent ad valorem to many classes of foreign manufactures. Another emergency measure passed on December 11, 1931, for one year, was authority for the issue of five orders imposing duty on foreign fruits, vegetables and flowers. Empire products were not taxed under either of these measures.

\*Throughout this article "United Kingdom" means the United Kingdom of Great Britain and Northern Ireland, and up to April 1, 1923, included also the Irish Free State.

The Import Duties Act assented to February 29, 1932, imposed on all foreign goods not already taxed or named in a limited schedule of exemptions, a rate of 10 per cent ad valorem. The Act created an Import Duties Advisory Committee with power to recommend increases in this rate with regard to particular goods. On reports from this Committee and Treasury Orders, rates have been increased to 15, 20, 25, 30 or 33 $\frac{1}{3}$  per cent on many articles. Products of the British Dominions, India, and Southern Rhodesia, and territories under mandate of any British Dominion, were exempted from the Import Duties Act until November 15, 1932, their tariff treatment after that date to depend on the results of the then pending Imperial Economic Conference at Ottawa. Products of other parts of the British Empire were exempted without limitation as to date and mandated territories could be exempted by Order in Council.

#### **Canada-United Kingdom Trade Agreement**

At the conclusion of the Imperial Economic Conference at Ottawa on August 20, 1932, a five-year trade agreement was signed between Canada and the United Kingdom. Among other things the United Kingdom prolongs exemption during the life of the agreement of Canadian goods from the new Import Duties Act, and guarantees specified margins of preference to Canada against foreign countries on 17 items. Preferences established by similar agreements with other Dominions are conceded automatically to Canada. An existing preference of 2s.  $\frac{1}{2}$ d. per lb. on tobacco is guaranteed for ten years unless the duty on foreign unmanufactured tobacco falls below that amount, in which event Canadian tobacco would be duty free. The United Kingdom allocates to Canada a quota of 2,500,000 cwt. per annum of hams and bacon (which are duty free) in anticipation of restricting importations of these products. The agreement gives to Canada all tariff preferences existing in the Colonial Empire, with the exception of some local Rhodesian preferences, and provides for enlarged Colonial preferences on certain goods.

As to Canadian concessions, it may be recalled that Canada on April 23, 1897, had extended to United Kingdom goods a Reciprocal Tariff one-eighth lower than the General tariff. There was introduced into the Canadian statutory tariff on June 13, 1898, a British Preferential schedule, at first, one-fourth lower than the General tariff, increased in 1900 to one-third, and in later years further extended and modified. The British Preferential schedule has, since 1898, been applied by statute to products of the United Kingdom and some other parts of the Empire. In the new agreement, Canada increases the former preferences to the United Kingdom on 223 items and gives certain undertakings regarding customs administration and privileges of British firms before the Canadian Tariff Board. Concessions are also made by Canada on some Colonial products.

#### **United Kingdom Agreements with other British Dominions**

Trade agreements between the United Kingdom and Australia, New Zealand, Union of South Africa, Southern Rhodesia, India and Newfoundland were also signed at Ottawa, August 20, 1932, which, in addition to providing specified preference margins on scheduled goods, guaranteed exemption of the products of these countries from the Import Duties Act, 1932. The exemption for Irish Free State products ceased on November 15, 1932. Animals, butter, eggs, cream, and meats of Irish Free State origin, are subject to special duties in the United Kingdom.

## THE CANADIAN INDUSTRIAL FIELD

## Scheduled Preferences to Canada

Article 2 and Schedule B of the Canada-United Kingdom agreement guarantee to Canada these margins of preference:—

	Rate to Canada	Rate to Foreign Countries
Apples, raw (excluding apples consigned to cider manufacturers for making cider).....	Free	2s. per quarter of 480 lbs.
Pears, raw.....	Free	15s. per cwt.
Apples, canned.....	Free	15% ad val.
	Free	4s. 6d. per cwt.
	Free	4s. 6d. per cwt.
	Duty on sugar content if any.	3s. 6d. per cwt. plus duty on sugar content if any.
Dried fruits: Figs and fig cake, plums (commonly called French plums and pruneloes), other plums, prunes and raisins.....	Free	10s. 6d. per cwt.
Eggs in shell.....	Free	1s. to 1s. 9d. per great hundred (120).
Condensed milk, whole, sweetened.....	Duty on sugar content.	5s. per cwt. plus duty on sugar content.
Copper, unwrought, whether refined or not, in ingots, bars, blocks, slabs, cakes, and rods.....	Free	2d. per lb.*

\*2d. per pound duty on copper not in operation at time of this compilation.

Article 3 and Schedule C provide that the General tariff rate of 10 per cent *ad valorem* shall not be reduced (except with the consent of Canada) on: Timber of all kinds imported into the United Kingdom in substantial quantities from Canada, in so far as dutiable as at August 20, 1932; fresh sea fish; canned salmon; other canned fish; asbestos, zinc, lead. Continued duty free entry of these commodities is assured to Canada under Article 1 of the agreement.

## Scheduled Preferences to other Dominions

Following are some preferences enjoyed by Canadian goods against foreign goods in consequence of United Kingdom guarantees of margins to Australia, New Zealand, Union of South Africa, Southern Rhodesia, India or Newfoundland:—

	Rate to Other Dominion	Rate to Foreign Countries
Canned or frozen salmon.....	Free	1½d. per lb.
Honey.....	Free	7s. per cwt.
Condensed milk, whole, not sweetened.....	Free	6s. per cwt.
Milk powder and other preserved milk excluding condensed milk, not sweetened..	Free	6s. per cwt.
Maize, flat, white.....	Free	10% ad val.
Grapes other than hothouse, Feb. 1-June 30.....	Free	1½d. per lb.
Peaches, Dec. 1-Mar. 31.....	Free	14s. per cwt.
Plums, Dec. 1-Mar. 31.....	Free	9s. 4d. per cwt.
Unspecified fruits (except stoned cherries) preserved in syrup.....	Duty on sugar content.	15% ad val. plus duty on sugar content
Rice, husked, including cargo rice and cleaned rice whole, but not broken.....	Free	1d. per lb.
Linseed.....	Free	10% ad val.
Linseed oil.....	Free	15% ad val.*
Cod-liver oil.....	Free	1s. 4d. per gal.
Magnesium chloride.....	Free	1s. per cwt. (On "pure" grade, additional 33½% ad val.)

Rate on linseed oil increased to £3.10s. per ton.



**Preferences under Import Duties Act, 1932**

From orders increasing the general 10 per cent ad valorem rate of the Import Duties Act may be quoted the following representative or typical preferences conceded by Article 1 of the trade agreement, which ensures continuance of duty-free entry of Canadian goods:—

	British Preferential Tariff	General Tariff
<b>METAL MANUFACTURES</b>		
Furniture wholly or mainly metal:—Tables, bedsteads, wire mattresses, stands, desks, counters; chairs, stools, seats; bookcases, bookshelves; cabinets, safes, cash and deed boxes, drawers and cupboards; shelving, storage bins, storage racks; office letter racks, letter trays; lockers; parts of any of the foregoing		
..... ad val.	Free	20%
Wrought enamelled baths (domestic) of iron or steel..... ad val.	Free	20%
Other iron or steel baths..... ad val.	Free	15%
Other hollow-ware of iron or steel, including tinned plate and domestic wrought enamelled hollow-ware of iron or steel..... ad val.	Free	20%
Metal door and window frames and casements..... ad val.	Free	15%
Stoves for domestic heating with solid fuel and parts..... ad val.	Free	15%
Other stoves, grates and ranges, for domestic cooking or heating, and parts..... ad val.	Free	20%
Iron and steel products:—Tubes, pipes and pipe and tube fittings; railway and tramway construction material; springs (other than upholstery and mattress wire springs); screws (except screws for wood, other than screw hooks, screw rings and screw knobs), nails (except wire nails), tacks, studs and spikes; rivets and washers; bolts and nuts; anchors and grapnels and parts thereof, chains and ships' cables..... ad val.	Free	20%
Iron and steel wire (including barbed wire), wire cable and rope (except electric wires and cables, insulated) and upholstery and mattress wire springs..... ad val.	Free	33½%
Wire nails and wire staples, of iron or steel..... per ton	Free	43
or, if higher, ad val.	Free	20%
Wire netting, wire fencing and wire mesh, of iron or steel, other than galvanized hexagonal wire netting..... ad val.	Free	30%
Galvanized hexagonal wire netting of iron or steel..... per ton	Free	£8
Screws for wood (other than hooks, rings, knobs)..... per lb.	Free	2d. to 9d.
Gold leaf..... ad val.	Free	15%
Various manufactures of aluminium, copper, lead, nickel, tin, zinc and alloys including any of these metals..... ad val.	Free	20%
Knives with one or more blades wholly or partly of steel or iron (other than surgical or machine knives); carving forks; knife sharpeners, wholly or partly of steel..... ad val.	Free	20%
Razors, including safety razors..... ad val.	Free	20%
Safety razor blades and blanks thereof, not ground.....	Free	20% ad val. plus 1s. a gross.
Other safety razor blade blanks.....	Free	20% ad val. plus 2s. a gross.
Hair clippers..... ad val.	Free	20%
Locks, padlocks, keys, bolts, latches, hasps and hinges of metal..... ad val.	Free	20%
Snap and slide fasteners, push buttons, studs, hooks and eyes..... ad val.	Free	20%
Cycles (other than motor), tires, tubes, and parts..... ad val.	Free	33½%
Skates..... ad val.	Free	20%
Forks, shovels, spades, scythes, sickles and agricultural implements, and parts thereof..... ad val.	Free	15%
Other tools and parts thereof..... ad val.	Free	20%
Electric wires and cables, insulated; telegraph, telephone and wireless apparatus; electric lighting appliances, other than glass bulbs for electric filament lamps; batteries and accumulators; electric bell apparatus; electric cooking and heating apparatus; electric meters; parts and accessories..... ad val.	Free	20%
Electric motor and generator casings and unwound rotors and stators..... ad val.	Free	15%
Hay and grass mowers (including mowing attachments to tractors) other than rotary blade type, milking machines, cream separators, churns for butter making, combined churns and butter workers, and cheese presses, and parts thereof..... ad val.	Free	15%
Ploughs, planters and seeders, reapers and binders, sheep shearers and clipping machines, threshers, agricultural tractors and other agricultural machinery, and parts thereof..... ad val.	Free	15%
Ball bearings and parts..... ad val.	Free	20%
Roller bearings and parts..... ad val.	Free	33½%
Machinery belting (including conveyor and elevator bands)..... ad val.	Free	15%
All other machinery and parts..... ad val.	Free	20%
Horse shoes..... ad val.	Free	33½%
Girders, beams, joists and pillars, whether fabricated or not..... ad val.	Free	33½%
Iron and steel plates and sheets up to £16 per ton..... ad val.	Free	33½%
Same, £16 to £30 per ton..... per ton	Free	£5. 6s. 8d.
or, if higher, ad val.	Free	20%
Same, if value exceeds £30 per ton..... ad val.	Free	25%

	British Preferential Tariff	General Tariff
WOOD PRODUCTS		
Doors not less than 6 feet by 2 feet..... per door or, if higher, ad val.	Free Free	2s. 20%
Planed and tongued and grooved or planed and otherwise manufactured hardwood flooring blocks or strips, ..... ad val.	Free	20%
Hardwood parquet flooring in sections composed of blocks or strips glued or other- wise joined together..... ad val.	Free	20%
Other builders' woodwork, including window frames, doors (less than 6 feet by 2 feet), gates, etc., and parts thereof..... ad val.	Free	15%
Wood wool..... per ton	Free	25s.
Wood flour..... ad val.	Free	15%
Staves, hollowed or bent..... ad val.	Free	20%
PAPER PRODUCTS		
Kraft paper and machine glazed paper (excluding imitation kraft paper and fully bleached white poster), and grease-proof paper (excluding imitation grease- proof paper), all, whether coated or otherwise treated, of a weight when fully extended equivalent to more than 7 lb. but not more than 90 lb. to the ream of 480 sheets of double crown measuring 30 inches by 20 inches, but not includ- ing paper imported solely for being spun into yarn..... ad val.	Free	16½%
Imitation kraft paper, imitation grease-proof paper, glazed imitation parchment, and glazed transparent paper, of same weight as foregoing ..... ad val.	Free	25%
Tissue paper, and writing paper in sheets 16½ inches by 21 inches or over weighing when fully extended equivalent to not more than 90 lb. to the ream of 480 sheets of double crown 30 inches by 20 inches..... ad val.	Free	16½%
Other paper and board made from paper or pulp, whether coated or otherwise treated in any manner or not (other than newsprint), of a weight when fully extended equivalent to not more than 90 pounds to the ream of 480 sheets of double crown measuring 30 inches by 20 inches, but not including paper im- ported solely for the purpose of being spun into yarn ..... ad val.	Free	20%
Paper, and board made from paper or pulp whether coated or otherwise treated in any manner or not (other than unlined strawboard), of a weight when fully extended equivalent to more than 90 pounds to the ream of 480 sheets of double crown measuring 30 inches by 20 inches. .... ad val.	Free	15%
Boards consisting of a middle layer of thin strips of wood covered on both sides with a layer of paper or paper board..... ad val.	Free	15%
Other articles (except newspapers, books and music) made either entirely from paper or board made from paper or pulp (including strawboard) or with addition only of adhesive substance or other material not exceeding 50 per cent of the value of the article..... ad val.	Free	20%
Transparent cellulose wrapping..... ad val.	Free	20%
TEXTILES AND APPAREL EXCEPT SILK		
Lace and lace net..... ad val.	Free	30%
Other tissue, including felt, ribbons, galloons, tapes, braids, trimmings, fringes, webbing..... ad val.	Free	20%
Blankets, shawls, coverlets, and travelling rugs..... ad val.	Free	20%
Flags..... ad val.	Free	20%
Handkerchiefs..... ad val.	Free	20%
Table linen, bed linen and bedding, towels, curtains, cushions, tapestries, dusters, mops and kitchen rubbers..... ad val.	Free	20%
Sacks and bags wholly or partly of vegetable fibre..... ad val.	Free	20%
Coir mats and matting..... ad val.	Free	20%
Cordage, cables, ropes and twine other than coir yarn wholly or partly of vegetable fibre other than cotton, linen, ramie, or seagrass..... ad val.	Free	15%
Nets and netting made wholly or partly of material in previous heading..... ad val.	Free	20%
Apparel of all kinds, complete or incomplete..... ad val.	Free	20%
Boots, booties, shoes, overshoes, slippers and sandals wholly or partly of rubber, balata or gutta-percha (except with leather or elastic uppers)..... per pair	Free	8d. to 4s.
Other boots, booties, shoes, overshoes, slippers and sandals ..... ad val.	Free	20%
Gloves, whole or part leather (except astrachan gloves) and leather shaped for mak- ing gloves..... ad val.	Free	30%
Gloves of cotton fabric but not astrachan gloves..... ad val.	Free	30%
Hats, caps, bonnets, hoods, hat shapes, brims, crowns and similar articles..... ad val.	Free	30%
Loosely felted hat forms and cone-shaped felt hat bodies..... ad val.	Free	25%
CHEMICALS, PAINTS		
Acetic acid of a strength not exceeding 95 per cent..... ad val.	Free	20%
Acetic acid of a strength exceeding 95 per cent..... ad val.	Free	33½%
Vinegar; acetate of lime; menthol (except natural)..... ad val.	Free	33½%
Formaldehyde, whether in solution or polymerised..... ad val.	Free	25%
Nitric acid; tartaric acid..... ad val.	Free	15%

CHEMICALS, PAINTS—*Concluded*

Cream of tartar; citric acid; ammonia alum, soda alum, potash alum; aluminium sulphate; ammonium chloride; lithopone; acetone; boric acid (refined); borax (refined); aluminium oxide (hydrated or anhydrous), but not including abrasives; anhydrous ammonia; ammonia liquor; sulphate of ammonia; nitrate of ammonia; sodium nitrate; sodium nitrite; calcium chloride; colloidal cotton (nitro-cellulose); tin oxide; zinc oxide; nicotine, nicotine sulphate and nicotine insecticides. .... ad val.

\*Paints, painters' enamels, lacquers, varnishes and printers' inks. .... ad val.

\*Distempers whether dry or not. .... ad val.

Free  
Free  
Free

20%  
20%  
20%

## MISCELLANEOUS

Leather, dressed (other than patent, varnished, japanned and enamelled and glazed). .... ad val.

Saddlery and harness (including horse boots) wholly or partly of leather. .... ad val.

Trunks, bags, wallets, pouches and other receptacles made wholly or partly of leather or material resembling leather, whether fitted or not. .... ad val.

Fur and other skins, including pieces (dressed), except leather. .... ad val.

Fur skins, merely sewn together, as used for making linings and trimmings, and known as strips and plates. .... ad val.

Other goods wholly or partly of fur skin. .... ad val.

(If containing silk, see "silk" duties.)

Manufactures (other than sheets, piping, tubing and rods, and machinery belting) wholly or partly of rubber, balata or gutta-percha (including vulcanite and ebonite). .... ad val.

(For automobile tires and tubes, see "McKenna" duties.)

Goods manufactured wholly or partly of asbestos. .... ad val.

Soap flakes. .... ad val.

Other soap, including abrasive soap and soap powder, but not toilet soap. .... ad val.

Toilet preparations (excluding essential oils):—Toilet soap; tooth paste or powder and liquid preparation for dental purposes and mouth washes; toilet paste or powder; toilet cream; hair dyes; scented sachets; lipstick, rouge and grease paint; preparations for use in manicure or chiropody; preparations for use on the hair, face or body; bath salts and essences; smelling salts; prepared fullers earth. .... ad val.

Toilet requisites:—Powder bowls or boxes and powder puffs; nail polishers; nail clippers, nail cleaners and nail files; denture bowls; manicure sets; parts of the above articles. .... ad val.

Hair combs. .... ad val.

Brooms and brushes, and parts (other than prepared bristles and other prepared animal hair). .... ad val.

Manufactures of cork (other than stoppers). .... ad val.

Felt base floor covering, linoleum and oilcloth. .... ad val.

Pipes for smoking tobacco, etc., holders for cigars and cigarettes, and parts thereof. .... ad val.

Appliances, apparatus, accessories and requisites for sports, games, gymnastics and athletics (other than apparel and skates). .... ad val.

Toys containing more than 10 per cent by weight of rubber whether vulcanized or not, or of celluloid. .... ad val.

Other toys. .... ad val.

Stationery (other than paper), including writing ink and ink powder, pencils, pencil leads and crayons, pen nibs, fountain pens, stylographic and other pens, sealing wax, paper clips and fasteners, stationery glassware and parts of any such articles. .... ad val.

Fresh shell fish of all sorts (other than oysters and prawns). .... ad val.

Oysters, except from 1st March to 31st May inclusive. .... ad val.

Dried apples, dried pears, dried peaches and dried nectarines, preserved by chemicals or artificial heat (other than fruit preserved in sugar) per cwt. .... ad val.

Other fruit (except dates and goods affected by items in Schedule B) preserved by chemicals or artificial heat other than fruit preserved in sugar. .... ad val.

Vegetables (other than tomatoes) preserved in air-tight containers, but not including pickles and vegetables preserved in vinegar. .... ad val.

Poultry and meat pastes whether mixed or not; and sausages. .... ad val.

Yeast. .... per cwt.

Free†

30%†

Free  
Free

25% or 30%  
20%

Free  
Free  
Free

20%  
20%  
20%

Free  
Free

25%  
15%

Free  
Free  
Free

20%  
30%  
30%

Free  
Free

10s. 6d.  
25%

Free  
Free  
Free

20%  
30%  
4s.

\*Spirits, hydrocarbon oil, linseed oil, certain "Key Industries" goods, if contained in paints, etc., would be dutiable separately.

†Rates subject to modification if goods contain spirits or "Key Industry" chemicals.

## General 10 per cent ad Valorem

All non-Empire goods (1) not included in an order made under the Import Duties Act increasing the 10 per cent General ad valorem rate, (2) not exempted from duty under that Act, and (3) not dutiable prior to the passing of the Import Duties Act, are subject to a rate of 10 per cent ad valorem. Canadian and other Empire products in this category are free of duty.

## Articles Exempt from Duty

The Import Duties Act of 1932, or orders made thereunder, exempt from duty, whether of Empire or foreign origin: Wooden telegraph poles; wooden pit-props; pulp wood; wood pulp; newsprint; material (under regulation) for shipbuilding; calcium carbide; calcium cyanimide; carborundum; coal and coke; unwrought nickel in ingots, cubes, etc.; cobalt in rondels, pellets, or squares; crude unground emery; raw and crushed feldspar; ferro-silicon (35 per cent up); gold and silver bullion; platinum in grain, ingot, bar, or powder; metallic ores and scrap metals; mica slabs and splittings; hay and straw; live quadruped animals; raw wool and animal hair; pigs' bristles not in final state for use; hides and skins (including fur skins but not goat skins), raw, dried, salted, or pickled; beef, veal, mutton, lamb, pork, bacon, ham, and edible offals, but not extracts, essences or meat in air-tight containers; herring meal; and about as many more articles.

## Pre-War Type, McKenna, Key Industry, and Silk Duties\*

Outside of the Import Duties Act, 1932, the main items of the United Kingdom tariff on which preference is granted are:—

## Pre-War Type

	British Preferential Tariff	General Tariff
Sugar, exceeding 99° polarization..... per cwt.	5s. 10d.	11s. 8d.
Sugar, exceeding 98° but not 99°..... per cwt.	4s. 9.2d.	11s. 8d.
Sugar, exceeding 97° but not 98°..... per cwt.	4s. 7.7d.	8s. 7d.
Sugar, exceeding 96° but not 97°..... per cwt.	4s. 6.3d.	8s. 4.3d.
Sugar, exceeding 95° but not 96°..... per cwt.	4s. 4.8d.	8s. 1.6d.
Lower degrees graded downward in proportion.		
Colonial sugar is granted a reduction from the British preferential tariff of 1s. per cwt. (96 degrees polarization) and a further 1s. reduction on a quota.		
Molasses..... per cwt.	1s. 3d. to 3s. 8½d.	2s. 7d. to 7s. 5d.
Molasses for making spirits or yeast or for stock food.....	Free	Free
Glucose, solid..... per cwt.	3s. 8½d.	7s. 5d.
Glucose, liquid..... per cwt.	2s. 8d.	5s. 4d.
Saccharin..... per ounce	1s 10½d.	3s. 9d.
Tea..... per lb.	2d.	4d.
Cocoa..... per cwt.	11s. 8d.	14s.
Cocoa husks and shells..... per cwt.	1s. 8d.	2s.
Cocoa butter..... per lb.	1½d.	1½d.
Coffee not kiln-dried, roasted, or ground..... per cwt.	4s. 8d.	14s.
Coffee, kiln-dried, roasted, or ground; coffee and chicory roasted and ground, mixed..... per lb.	1½d.	2d.
Chicory, raw or kiln-dried..... per cwt.	11s. ½d.	13s. 3d.
Chicory, roasted or ground..... per lb.	1½d.	2d.
Hops..... per cwt.	53s. 4d.	80s.
Hop oil..... per ounce	13s. 4d.	20s.
Other preparations from hops.....	Rate based on hops used	
Tobacco, unmanufactured..... per lb.	7s. 5½d.	9s. 6d.
Cigars..... per lb.	to 8s. 3½d.	to 10s. 6½d.
Cigarettes..... per lb.	14s. 2½d.	18s. 1d.
Other manufactured tobacco..... per lb.	11s. 5½d.	14s. 7d.
Brandy, rum, imitation rum, and Geneva, liqueurs, cordials, mixtures, potable naphtha and methyl alcohol, and some other spirits, to be tested..... per proof gal.	8s. 10½d.	11s. 4d.
Perfumed spirits..... per liquid gal.	to 10s. 9½d.	to 13s. 9d.
Wine up to 25°..... per gal.	72s. 10d.	75s. 4d.
Wine 25-27°..... per gal.	to 75s. 8d.	to 78s. 5d.
Wine 27-42°..... per gal.	116s. to 119s. 5d.	to 120s. to 123s. 5d.
Wine over 42°..... per gal.	2s.	4s.
Sparkling wines.....	2s. 8s.	8s.
Still wine in bottles.....	4d.	8d.
	per degree additional	
	6s. 3d.	12s. 6d.
	per gal. additional	
	1s.	2s.
	per gal. additional	

\*These goods are subject to the tariff treatment indicated even when a part or ingredient of other goods, e.g., confectionery pays duty on sugar content.



Beer, playing cards, chloral hydrate, chloroform, collodion, acetic ether, butyric ether, sulphuric ether, ethyl bromide, ethyl chloride, ethyl iodide, hydrocarbon oils, matches, mechanical lighters and table waters are dutiable at the same rate from all countries.

## McKenna Duties\*

	British Preferential Tariff	General Tariff
Motor cars including motor bicycles and motor tricycles and their accessories and component parts, including tires and tubes..... ad val.	22½%	33½%
Pianos, non-automatic; and component parts and accessories thereof..... ad val.	13½%	20%
Piccolos, flutes, clarinets, flageolets, bassoons and cornets; and component parts and accessories thereof..... ad val.	13½%	20%
Stringed musical instruments and component parts and accessories thereof..... ad val.	13½%	20%
Gramophones without electrical amplification, not exceeding 10s. each..... ad val.	10%	15%
Gramophones without electrical amplification, exceeding 10s. each..... ad val.	13½%	20%
Concertinas not exceeding 35s. each..... ad val.	10%	15%
Concertinas exceeding 35s. each..... ad val.	13½%	20%
Other musical instruments, accessories and component parts, records and other means of reproducing music..... ad val.	22½%	33½%
Clocks, alarm (other than electric clocks) not exceeding 30s. each..... ad val.	13½%	20%
Clocks (other than electric or alarm clocks) not exceeding 30s. each..... ad val.	16½%	25%
Clock movements complete (other than movements of electric clocks), exceeding 15s. each..... ad val.	16½%	25%
Other clocks, watches, and component parts of clocks and watches..... ad val.	22½%	33½%
Cinematograph films, blanks—per linear foot x 1½ in. wide.....	¾d.	1d.
Cinematograph films, positives—per linear foot x 1½ in. wide.....	¾d.	1d.
Cinematograph films, negatives—per linear foot x 1½ in. wide.....	¾d.	5d.
Negative cinematograph films, where specified number of actors British.....	Treated as blank film	
Films, certified by Royal Society of London for scientific exhibitions.....	Free	Free

\*Original 1915 rates were reduced in 1933 on some musical instruments and clocks.

## Key Industry Duties

	British Preferential Tariff	General Tariff
Optical glass and optical elements, microscopes, field and opera glasses, theodolites, sextants, spectroscopes and other optical instruments and their component parts..... ad val.	Free	50%
Scientific glassware, lamp-blown ware, and laboratory porcelain..... ad val.	Free	33½%
Scientific instruments, gauges and measuring instruments of precision of the types used in engineering machine shops and viewing rooms, whether for use in such shops or rooms or not, and component parts of dutiable scientific instruments..... ad val.	Free	33½%
Wireless valves and similar rectifiers, and vacuum tubes..... ad val.	Free	33½%
Ignition magnetos and permanent magnets..... ad val.	Free	33½%
Amorphous carbon electrodes, but not primary battery carbons or arc-lamp carbons..... ad val.	Free	33½%
Arc-lamp carbons..... per lb.	Free	1s.
Hosiery latch needles..... ad val.	Free	33½%
Metallic tungsten and manufactures thereof, ferro-tungsten, and compounds (not ores or minerals) of thorium, cerium and the other rare earth metals..... ad val.	Free	33½%
Synthetic organic chemicals (other than dyestuffs, colours, and colouring matters and organic intermediate products for their manufacture), analytical re-agents, and all other fine chemicals (except sulphate of quinine of vegetable origin) and chemicals manufactured by fermentation processes..... ad val.	Free	33½%
Molybdenum, ferro-molybdenum and molybdenum compounds, and vanadium, ferro-vanadium and vanadium compounds (but not ores or minerals of molybdenum or vanadium)..... ad val.	Free	33½%

## Silk Duties

	British Preferential Tariff	General Tariff
Silk tissues.....per lb. of silk..	1s. 3½d. to 6s. 5½d.	1s. 7d. to 7s. 9d.
plus, on value of tissue	8½%	10%
Artificial silk tissues.....per lb. of artificial silk ..	2s. 11d.	3s. 6d.
plus, on value of tissue	8½%	10%
Apparel containing silk or silk-and-artificial silk, where value of silk or silk-and-artificial silk component exceeds 20% of total value.....ad val.	36½%	43½%
or, if higher, per lb.	10s.	12s.
Apparel containing artificial silk but not silk, where value of artificial silk component exceeds 20% of total value.....ad val.	36½%	43½%
or, if higher, per lb.	4s. 2d.	5s.
Other articles containing silk or artificial silk, where value of silk or artificial silk component exceeds 20% of total value.....ad val.	36½%	43½%
Articles containing silk or artificial silk, where value of silk or artificial silk component represents 5%-20% of total value.....ad val.	16½%	*20%
Alternative rates on apparel, per lb.	1s. 4½d. or 3s. 4d.	*1s. 8d. or *4s.
Articles containing silk or artificial silk where value of silk or artificial silk component is 5% or less of total value.....ad val.	10%	*12%
Alternative rates on apparel, per lb.	3½d. or 7½d.	*4d. or *9d.

\*Rates of the Import Duties Act, 1932, are applicable where higher.

## Empire Content

In order to qualify for preferential tariff treatment, goods must be shown to the satisfaction of the Commissioners of Customs and Excise to have been (1) consigned from, and (2) grown, produced, or manufactured in the British Empire. Goods regarded as "growth or produce" must have 100 per cent Empire content. Manufactured tobacco and sugar are granted preference to the extent to which the raw material therein (down to 5 per cent) is shown to be Empire grown. Optical goods and parts, including cameras, require a 75 per cent Empire content. An order, made effective April 1, 1933, prescribed a 50 per cent Empire content for a selected list of manufactured goods including machinery, electrical goods, motor cars, metal furniture, various iron and steel products, rubber manufactures, footwear, toys, toilet goods, and many other articles, altogether 45 headings of the import classification. All other manufactured goods including, for example, paper, textiles, foods, wood products, qualify for preference on a 25 per cent Empire content. Parts or ingredients dutiable under some measure other than the Import Duties Act, 1932, require separate certification of origin from the actual producers of such parts or ingredients.

For the purpose of these regulations the value of manufactured goods is defined as the cost to the manufacturer at the factory or works, and includes the value of containers and other forms of interior packing ordinarily sold with the article when it is sold retail. It does not include the manufacturer's or exporter's profit or the cost of interior packing, carriage to port, and other charges incidental to the export of the goods subsequent to their manufacture. Regulations issued July 27, 1933, state that the value of manufactured goods shall not include any customs, excise, or other duty paid or payable in respect of materials received into the factory, when such duties are subsequently refunded on the exportation of the finished goods.

The United Kingdom Finance Act, assented to June 28, 1933, provides that for the purpose of granting preference to Empire products under the Import Duties Act, 1932, or the Ottawa Agreements Act, 1932, goods are not deemed to have been manufactured in the particular Empire country concerned unless

such proportion of their value, as is prescribed by Board of Trade regulations, is derived from expenditure of a kind so prescribed, in such country, in respect of materials grown or produced or work done in that country, with the proviso that in reckoning such proportion there shall be included expenditure in (1) United Kingdom; (2) any country which is a party to one of the agreements with the United Kingdom at the Imperial Economic Conference, 1932 (*see* page 41), mandated territories of such country; (3) territory as defined, corresponding to the Colonial Empire; (4) His Majesty's Protectorates; and (5) any territory to which an Order in Council has granted exemption under the Import Duties Act.

"Where Empire goods consigned to Great Britain or Northern Ireland have been transhipped en route, or have been shipped from a foreign port after overland transit from the Empire country of origin, the importer at the time of making entry will be required to produce the through bill of lading or railway consignment note from the country of production to Great Britain or Northern Ireland. Where a through bill of lading or consignment note is not available, the buyer's order, the invoice, local bill of lading or consignment note from the original point of origin, and a certificate of arrival or landing at, and exportation from, the port of transhipment will be required. Such certificates are to be signed by the proper Colonial or Foreign Customs Officer at the port of transhipment, and in the case of the latter the signature must be visaed by the British Consular Authority. IT IS ESSENTIAL TO PROVE THAT THE GOODS WERE CONSIGNEE FROM THE EMPIRE TO GREAT BRITAIN OR NORTHERN IRELAND, AND NOT TO A FOREIGN COUNTRY FROM WHICH THEY WERE SUBSEQUENTLY RE-CON-SIGNED TO GREAT BRITAIN OR NORTHERN IRELAND." (Section 12, London Custom House Notice 27A, August, 1933.)

#### Value for Duty

Although most Canadian products enter the United Kingdom duty free, the law governing customs valuation is important on account of its effect on the ad valorem duties leviable on competing goods. The freight and related costs of transport are included in this valuation.

Section 15 of the Import Duties Act of 1932 (applied by the Finance Act of June 28, 1933, to any tariff enactment) states that the value of any imported goods for duty purposes shall be the price which an importer would give for the goods on a purchase in the open market if the goods were delivered to him at the port of importation, freight, insurance, commission and all other costs, charges and expenses incidental to the purchase and delivery at that port (except any duties of customs) having been paid. Duty is to be paid on that value as fixed by the Commissioners of Customs and Excise. In determining value the Commissioners may have regard not only to the value of the goods as declared by an importer, but to all relevant considerations. In this regard are mentioned (a) price which at the time of importation is being paid by other importers for similar goods; (b) if that cannot be determined to the satisfaction of the Commissioners, then to the price at which the goods or other like imported goods are being freely offered for sale in the United Kingdom, less customs duties, merchandising expenses, and profits incidental to marketing after importation; or (c) if the last-mentioned price cannot be so determined then to the price at which like goods manufactured or produced in the United Kingdom are being freely offered for sale, less an allowance in respect of duties of customs which that price would include if the goods had been imported and in respect of reasonable merchandising expenses, and profits incidental to marketing.

### Irish Free State

The Irish Free State on becoming a separate customs area on April 1, 1923, adopted the tariff of the United Kingdom with the then existing preferences on Empire goods. (Previously the tariff of the United Kingdom had been in force in the whole of Ireland.) Since 1923 the tariff of the Irish Free State has been undergoing change and extension from year to year, with the principle of preference for British Empire goods maintained. The dutiable list has expanded much since the beginning of 1932, but nevertheless a wide range of merchandise still enters the Irish Free State exempt from duty.

Canada has been granting the Irish Free State the benefit of her British preferential tariff since its institution in 1897 and the Irish Free State has accorded Canadian goods the benefit of all preferential duties in force.

At the conclusion of the Imperial Economic Conference at Ottawa, in 1932, a five-year trade agreement was signed between Canada and the Irish Free State, whereby goods, the produce or manufacture of Canada, imported into the Irish Free State, are not to be subject to other or higher duties than those paid on similar goods, the produce or manufacture of any other country. In return, Canada guarantees that products or manufactures of the Irish Free State shall not be subject to other or higher duties than those paid on similar goods, the produce or manufacture of the United Kingdom.

Following are representative or typical duties in the Irish Free State at the present time:—

	British Preferential Tariff	General Tariff
Bags, of paper, up to 8 oz. in weight..... ad val.	33 $\frac{1}{3}$ %	50%
Batteries, dry, and parts (except carbon rods, brass caps, and brass sockets)..... ad val.	33 $\frac{1}{3}$ %	50%
Bedsteads and most parts..... ad val.	50%	75%
Bicycles and tricycles, non-mechanical..... ad val.	25%	37 $\frac{1}{2}$ %
Blankets, blanketing and rugs (except floor)..... ad val.	30%	45%
Bound novels in English..... per copy	1d.	1 $\frac{1}{2}$ d.
Books, other, in leather or imitation leather, in English..... ad val.	20%	30%
Boots, shoes, slippers, goloshes, sandals and clogs (except children's) with uppers wholly or mainly leather or skin..... ad val.	25%	30%
Boots, shoes, slippers, goloshes, sandals and clogs, other..... ad val.	15%	20%
Brushes and brooms..... ad val.	33 $\frac{1}{3}$ %	50%
Builders' metal door and window frames, sashes and casements..... ad val.	33 $\frac{1}{3}$ %	50%
Clocks, watches and parts..... ad val.	22 $\frac{1}{2}$ %	33 $\frac{1}{3}$ %
Clothing of woven wool or worsted: Men's or boys' suits, overcoats, hats, caps, women's and girls' coats, wraps, costumes, dresses..... ad val.	40%	60%
Clothing—		
Shirts and collars..... ad val.	30%	45%
Bathing costumes..... ad val.	10%	15%
Women's silk underclothing..... ad val.	60%	90%
Embroidered handkerchiefs..... ad val.	60%	90%
Proofed or leather..... ad val.	40%	60%
Unspecified..... ad val.	30%	45%
Cocoa preparations..... per lb.	2s.	3s.
Containers, empty, of cardboard, pasteboard, millboard, or like materials..... ad val.	33 $\frac{1}{3}$ %	50%
Cordage, cables, ropes and twine of hemp or like materials, except binder twine, coir yarn and plaited or cable-laid sash cords..... ad val.	20%	30%
Cotton towelling (except Turkish and chenille)..... ad val.	20%	30%
Custard powders..... per cwt.	45s.	60s.
Cutlery of iron or steel:—Knives, sharpeners, forks, spoons, tongs, razors, and parts..... ad val.	10%	15%
Disinfectants and insecticides, proprietary..... ad val.	15%	22 $\frac{1}{2}$ %
Eggs in shell..... per 120	8s.	12s.
Eggs, dried or frozen..... per cwt.	45s.	60s.
Electro-plate tankards and parts..... ad val.	25%	37 $\frac{1}{2}$ %
Felting, roof, and substitutes..... ad val.	25%	37 $\frac{1}{2}$ %
Fillers and flats for egg boxes..... ad val.	20%	30%
Fruit in syrup, bottled; fruit dutiable <i>as such</i> , i.e., plums, prunes, figs, if canned..... per lb.	12d.	18d.
Same, more than 33 $\frac{1}{3}$ % sweetening matter..... per lb.	1d.	1 $\frac{1}{2}$ d.
Same, more than 33 $\frac{1}{3}$ % sweetening matter..... per lb.	3d.	3 $\frac{1}{2}$ d.



	British Preferential Tariff	General Tariff
Furniture of wood..... ad val.	50%	75%
Gas meters..... ad val.	10%	15%
Glue..... ad val.	33½%	50%
Grease, lubricating (as defined)..... ad val.	25%	37½%
Handcarts and wheelbarrows, mainly of wood..... ad val.	50%	75%
Harness and harness leather..... ad val.	25%	37½%
Hollow-ware, domestic, of galvanized wrought-iron or steel..... ad val.	20%	30%
Horse shoes..... ad val.	33½%	50%
Ink, writing..... ad val.	25%	37½%
Iron, cast:—Gate-posts and columns; desk, seat and table standards; external water and soil pipes, gutters and connections, gully traps, grids, manhole covers and frames; sash weights; pavement light frames, sky and dead lights; stop-cock boxes; hydrant and valve covers, lamp and street standards; water pumps (not industrial)..... ad val.	15%	22½%
Iron and steel, structural, e.g., beams, girders, channels, joists, angles, columns, posts, tees, advanced beyond hammering, rolling, or casting..... ad val.	33½%	50%
Iron or steel, galvanized, corrugated, except unworked flat sheets..... ad val.	10%	15%
Knitted fabric (except silk or artificial silk)..... ad val.	30%	45%
Lead, sheet and piping..... ad val.	10%	15%
Leather, sole or insole..... ad val.	25%	37½%
Machinery, agricultural, horse-drawn, viz.:—Chaff cutters, corn drills, disc drill- cleaners, mowers (except lawn) with or without reaping attachments, hay carts, hay collectors up to 15 ft. wide, hay raddles (excluding kickers), sprayers, land rollers, oil cake breakers, one-wheeled grubbers and hoes, ploughs, potato diggers, spring tooth and zig-zag harrows, tumbler and wheel rakes..... ad val.	25%	33½%
Machinery, cheese-making..... ad val.	50%	75%
Meats: Beef, veal, mutton, lamb; poultry..... per lb.	4d.	6d.
Foregoing in bottles, jars, tins, etc..... per cwt.	56s.	84s.
Mechanical lighters..... ad val.	25%	37½%
Milk, condensed, sweetened, full cream..... per cwt.	40s.	60s.
Musical instruments..... ad val.	22½%	33½%
Paints and distempers in liquid or paste form except white lead and artists' colours ..... ad val.	20%	30%
Pastes, adhesive, office..... ad val.	25%	37½%
Photographic apparatus..... ad val.	10%	15%
Pigs' meat..... per cwt.	56s.	84s.
Plaster of Paris compositions in sheets or slabs..... per sq. yd.	6d.	9d.
Polishing preparations..... ad val.	25%	37½%
Putty..... ad val.	20%	30%
Quilts and covers..... ad val.	50%	75%
Sacks and bags, jute..... ad val.	25%	37½%
or, if higher, each..... 1d.	1d.	1d.
Sausage casings..... per cwt.	56s.	84s.
Soap, soap powders, and substitutes..... ad val.	33½%	50%
Spades and shovels..... ad val.	33½%	50%
Sparkling plugs..... each..... 1s.	1s.	1s. 6d.
Sports goods (most)..... ad val.	10%	15%
Stationery:—Envelopes, notepaper, writing pads, manuscript books, commercial stationery, labels and tags (except woven), in bulk, trade catalogues in bulk ..... ad val.	33½%	50%
..... per lb.	1s.	1s. 6d.
Sugar confectionery..... ad val.	50%	75%
Vehicles, animal-drawn..... ad val.	£10	£15
or, if higher, each..... per gal.	1s. 6d.	2s.
Vinegar..... ad val.	1s. 6d.	2s.
Wood:—Planed or dressed, tubs, empty packing cases, gates, shutters, fence posts, mouldings, skewers, some tool handles..... ad val.	33½%	50%

### Preference Conditions

The preferential rates of duty in the Irish Free State are granted on condition that the goods have been consigned from and grown, produced or manufactured in a country forming part of the British Commonwealth of Nations (some exceptions for the United Kingdom). Manufactured articles generally are not entitled to the preferential rates unless at least 25 per cent of their value is the result of labour within the Commonwealth. Regulations similar to those adopted by the United Kingdom apply to goods trans-shipped en route or shipped from a foreign port after overland transit from the British Empire country of origin.

### Value for Duty

The statutory provision covering valuation of goods for customs purposes in the Irish Free State is in the following terms:

The value of any article for the purpose of ad valorem duty shall be taken to be the price which an importer would give for the article if the article were delivered, freight and insurance paid, in bond at the place of importation, and duty shall be paid on that value as fixed by the Revenue Commissioners.

The position, briefly stated, is, therefore, that the dutiable value is the cost price of the goods to the importer plus freight, insurance or related costs of carrying the goods to the place of importation in the Irish Free State.

### Australia

Australia, in 1902, adopted a uniform tariff to replace the tariffs of the six states which, the year before, had been formed into the Commonwealth. The principle of preference for United Kingdom goods was introduced into the Australian tariff in 1908. In subsequent tariff enactments the British preferential schedule was greatly extended and margins of preference enlarged. To implement a formula adopted in the Australian-United Kingdom trade agreement made at the Imperial Economic Conference at Ottawa in 1932, still further new preferences were created. United Kingdom goods, free of duty or liable to not more than 19 per cent ad valorem, are to enjoy a differential of, at least, 15 per cent ad valorem as compared with the most favoured foreign country. When the rate on United Kingdom goods is over 19 per cent ad valorem but not over 29 per cent ad valorem, the margin is to be  $17\frac{1}{2}$  per cent ad valorem. If the rate on United Kingdom goods exceeds 29 per cent, the advantage over foreign goods is to be 20 per cent ad valorem. There are some exceptions, including a proviso that the formula shall not compel a rate on foreign goods of over 75 per cent ad valorem.

In pursuance of trade agreements, the benefit of the British preferential tariff of Australia is now accorded in large measure to Canada and to New Zealand. Following practice which obtained before the Irish Free State was established, it applies also to that area. Australia in 1926 established a schedule of products to be admitted duty free from Papua and the mandated territory of New Guinea and, in 1932, conceded British preferential rates on various articles to Crown colonies. The general tariff is applicable to some parts of the Empire and to all non-Empire countries.

### Canadian-Australian Trade Agreement

The first preferences obtained for Canadian goods in Australia arose out of a limited exchange of preferences effected by concurrent legislation in both countries, brought into force on October 1, 1925. This arrangement was superseded by a formal trade agreement, very comprehensive in scope, signed at Ottawa on June 5, 1931, and at Canberra on July 8, 1931. It was approved by an Australian Act of Parliament, assented to on July 25, 1931, and by a Canadian Act of Parliament, assented to August 3, 1931. On the latter date the Agreement went into force.

Under Article I of the Agreement, Canada concedes to Australia reductions in duty on various items (Schedule A), and on other items grants the British Preferential tariff. Article II establishes Schedule B which enumerates items on

which Australia gives Canada either British Preferential, \*Intermediate or General tariff rates, and as regards goods falling outside this Schedule, grants the British Preferential tariff. Article III of the Agreement stabilizes margins of preference in Schedules A and B. Article IV excludes from dutiable value inland freight charges in excess of the charges to the nearest point of exit from the exporting country. Articles V and VI waive the anti-dumping laws of the respective countries as regards each other's goods. Article VII declares that each country's regulations as regards application of its British Preferential tariff shall govern in determining what shall be deemed as a Canadian or Australian product. Article VIII defines the terms British Preferential, Intermediate, and General tariffs as used in the Agreement. Article IX affords means for either country to apply its General tariff to any particular goods the importation of which from the other country would injuriously affect the sale of similar goods produced in the importing country, providing that the exporting country after three months' notice has failed to remedy the situation.

Out of 438 items comprising the complete Australian tariff, the agreement gives Canada the British Preferential rate on 420 items, and special rates on 6 items, leaving 12 items under the General tariff.

## PREFERENCES TO CANADA UNDER SCHEDULE B

	British Preferential Tariff	General Tariff	Rate to Canada
Tinned salmon..... per lb.	1d.	4d.	B.P.
Tinned crustaceans..... per lb.	2½d.	4d.	B.P.
Other tinned fish..... per lb.	1d.	2½d.	B.P.
Calcium carbide..... per lb.	1d.	2d.	B.P.
Logs, unsawn for making plywood and veneers (subject to Departmental by-law)..... ad val.	5%	10%	5%
Other unsawn logs, rough spars..... ad val.	10%	30%	20%
Undressed Redwood and Western Red Cedar..... per 100 sup. ft.	2s.-8s.	4s.-10s.	2s.-8s.
Undressed timber of unspecified classes..... per 100 sup. ft.	10½s.-13½s.	12½s.-15½s.	10½s.-13½s.
Same, under by-law, not less than 4 x 3 inches for making boxes..... per 100 sup. ft.	Free	1s.	Free
Other box timber cut to sizes..... per 100 sup. ft.	12s.-14s.	14s.-16s.	12s.-14s.
Dressed or partly dressed timber, bent or cut into shape, otherwise unspecified..... ad val.	50%	65%	55%
Timber, tongued and/or grooved; weather boards; some dressed or moulded timber..... per 100 sup. ft.	22s.	24s.	22s.
Plywood..... ad val.	50%	65%	55%
(On some plywood, alternative specific rates, if higher)			
Veneers..... ad val.	50%	70%	55%
Laths for plastering..... per 1,000	10s.	14s.	10s.
Palings..... per 1,000	14s.	16s.	14s.
Shingles..... per 1,000	3s.	3s.	3s.
Undressed timber under 7½ feet x 10½ x 2½ inches and Redwood and Douglas fir plywood door panels, not over 2 x 2 feet (or equivalent) for making doors (subject to by-law)..... per 100 sup. ft.	4s.-5s.	6s.-7s.	4s.-5s.
Doors of wood and fly doors..... each	8s.	10s.	8s.
or, if higher, per sup. ft.	4d.	6d.	4d.
Staves..... per 100	8s.-11s.	10s.-13s.	8s.-11s.
Wood wool..... ad val.	20%	35%	B.P.
Goloshes; rubber sandboots, shoes and plimsolls..... per pair	1s. 6d.	2s. 6d.	1s. 9d.
or, if higher, ad val.	25%	42½%	30%
Unassembled motor vehicle chassis (stripped)..... ad val.	Free	32½%	15%
Assembled motor vehicle chassis (stripped)..... ad val.	5%	45%	35%
Household vacuum cleaners..... ad val.	Free	20%	B.P.

The twelve items in Schedule B under the General tariff comprise: Wheat; wheat flour; some agricultural implements; motor car bodies, metal panels, gears, and shock absorbers; rubber tires and tubes; gum and wading boots of rubber; pianos and parts; wrapping paper; paper felt and carpet felt paper.

\*Intermediate since changed to special rates.

## THE CANADIAN INDUSTRIAL FIELD

## Representative Australian Tariff Rates

The following list of typical Australian tariff rates indicates the range of preferences obtaining under many items where the British Preferential rate is extended to Canada.

	British Preferential Tariff	General Tariff
Confectionery, including chocolate..... per lb.	3d.	3½d.
..... or, if higher, ad val.	35%	55%
Various groceries..... ad val.	20%	37½%
Furniture and unspecified wood manufactures..... ad val.	50%	70%
Printing paper, in rolls under 10 inches wide or sheets under 500 sq. inches..... ad val.	15%	30%
Newsprint and other printing paper not in small sheets..... per ton	Free	£4
Writing paper, 16 x 13 inches, or larger..... ad val.	10%	30%
..... Deferred duty, ad val.	20%	40%
Carbon papers..... ad val.	20%	37½%
Playing cards..... per doz. packs	7s.	10s.
Wall paper..... ad val.	Free	15%
Roofing and sheathing felt and paper..... ad val.	30%	40%
Wall and ceiling parts..... ad val.	30%	50%
Printed advertising matter (paper)..... per lb.	1s.	1s. 6d.
..... or, if higher, ad val.	45%	65%
Glass paper and flint paper..... ad val.	30%	50%
Other abrasive paper, and abrasive cloth..... ad val.	Free	15%
Dressed fur skins..... ad val.	15%	30%
Gloves of rubber..... ad val.	35%	55%
Working gloves of textile or leather..... per doz. pairs	2s.	3s.
..... or, if higher, ad val.	25%	42½%
Other gloves..... ad val.	Free	25%
Socks..... per doz. pairs	12s.	25s.
..... or, if higher, ad val.	45%	65%
Silk or cotton stockings..... per doz. pairs	15s.	35s.
..... or, if higher, ad val.	45%	65%
Woollen stockings..... per doz. pairs	15s.	30s.
..... or, if higher, ad val.	45%	65%
Corsets..... ad val.	30%	50%
Boots and shoes (except rubber)..... ad val.	45%	65%
Suits, overcoats, blouses, skirts, costumes..... ad val.	60%	75%
..... or, if higher	Various specific rates	
Table covers, doyleys, sheets, pillow cases and covers, bed spreads, and some other drapery and napery (not containing wool)..... ad val.	25%	45%
Cotton or linen handkerchiefs..... ad val.	30%	50%
..... or, if higher, per doz.	1s.	1s.
Linoleums and similar floor coverings..... ad val.	20%	37%
Carpets and floor rugs..... ad val.	15%	30%
Felts for asbestos cement sheet making machines..... ad val.	Free	10%
Rubber and leather belting..... ad val.	30%	50%
Rubber floor coverings and mats..... ad val.	25%	42½%
Various rubber manufactures..... ad val.	25%	42½%
Dredging and excavating machinery of the shovel, back filler, skimmer, grab, drag- line, or similar types, wholly or partly revolving and/or self-propelling, of a working weight up to and including 45 tons..... ad val.	45%	65%
Foregoing, 45-75 tons..... ad val.	27½%	47½%
Foregoing, exceeding 75 tons..... ad val.	Free	15%
Other earth and rock cutting, dredging and excavating machinery..... ad val.	27½%	47½%
Horse road rollers and machines, road scoops and scrapers..... ad val.	20%	30%
Road rollers, other, including scarifier attachments..... ad val.	40%	60%
Road making machines unspecified..... ad val.	35%	55%
Cream separators..... ad val.	Free	15%
Churns..... ad val.	22½%	40%
Portable steam engines..... ad val.	27½%	45%
Motive power machinery unspecified in the tariff..... ad val.	45%	65%
Locomotives; road rollers (except horse-drawn)..... ad val.	40%	60%
Roller bearings and ball bearings..... ad val.	Free	15%
Piston rings for internal combustion engines..... each	4d.	6d.
..... or, if higher, ad val.	45%	65%
Typewriters, including covers..... ad val.	Free	20%
Various classes of machinery not specified in the tariff..... ad val.	45%	65%
Spark plugs even when part of chassis or car..... each	1s. 6d.	1s. 9d.
..... or, if higher, ad val.	45%	65%
Radio storage batteries and automobile storage batteries (not for propulsion) ad val.	50%	70%
Dry batteries and dry cells, 1 pound and less..... each	4d.	6d.
Dry batteries and dry cells, over 1 pound each..... per lb.	7d.	10d.
Electric filament lamps..... per lb.	2s.	4s.
Electric motors up to 2 h.p..... ad val.	45%	65%
Electric stoves and ranges..... ad val.	32½%	52½%
Other electric heating and cooking appliances..... ad val.	27½%	45%
..... Some, if higher	Alternative specific rates	



	British Preferential Tariff	General Tariff
Electric fans.....	ad val.	
Watt-hour meters (alternating current).....	each 15% 10s.	40% 15s.
Other electrical measuring or recording instruments.....	or, if higher, ad val.	35% 55%
Telephone switchboards.....	ad val.	Free 15%
Other switchboards.....	ad val.	40% 60%
Electrical insulators of porcelain up to 22,000 volts.....	ad val.	45% 65%
Electrical appliances unspecified in the tariff.....	ad val.	35% 60%
Electric smoothing irons.....	ad val.	27½% 47½%
	each 5s.	7s. 6d.
Electric refrigerators and parts.....	or, if higher, ad val.	45% 65%
Threshing machines.....	ad val.	55% 75%
Motor car engines.....	ad val.	Free 10%
Some chassis parts.....	ad val.	45% 65%
	or, if higher	Alternative specific rates
Some vehicle parts.....	ad val.	40% 60%
Brake and transmission linings.....	ad val.	Free 15%
Pneumatic tire valves.....	ad val.	Free 15%
Children's tricycles.....	ad val.	30% 60%
Boiler tubes.....	ad val.	Free 15%
Wrought iron and steel pipes and tubes up to 3 inches internal diameter.....	ad val.	Free 15%
Iron and steel wire, 15 gauge and finer.....	ad val.	30% 55%
Iron and steel wire unspecified in the tariff.....	per ton 52s.	172s.
Bolts, nuts, washers.....	ad val.	45% 65%
	Some, if higher, per cwt.	11s. 16s.
Wood screws.....	ad val.	27½% 60%
Various classes of staples, spikes, nails and tacks.....	per cwt.	5s. 6d. 8s.
	or, if higher, ad val.	25% 45%
Common cutlery including razor blades.....	ad val.	5% 30%
Metal pins, hooks and eyes (not in fancy boxes).....	ad val.	Free 15%
Tool handles.....	per doz.	4s. 6d. 7s. 6d.
	or, if higher, ad val.	50% 65%
Dies, taps, and chasers, machine or hand; screw-plates, stocks.....	ad val.	45% 65%
Hand tools (many), as prescribed by Departmental By-laws.....	ad val.	Free 15%
Hand tools of metal, other.....	ad val.	35% 55%
Industrial machines and appliances as enumerated (342 items).....	ad val.	Free 15%
Unspecified machinery.....	ad val.	45% 65%
Weighing machines and scales.....	ad val.	27½% 45%
Brass and bronzework for plumbing and engineering.....	ad val.	45% 65%
Metal manufactures unspecified in the tariff.....	ad val.	45% 65%
Lamps and lanterns.....	ad val.	25% 42½%
Gramophones and phonographs.....	ad val.	50% 70%
Cameras and accessories.....	ad val.	Free 20%*
Articles for games; fishing appliances.....	ad val.	30% 50%
Toys.....	ad val.	30% 60%
Clocks (except wood, and electric); watches (except wrist watches); clock and watch movements.....	ad val.	10% 30%
Patent and proprietary medicines and drugs, non-spirituous.....	ad val.	30% 40%
Cordage, rope, twine, and manufactures of.....	mainly ad val.	40% 60%
Reaper and binder twine of yarn.....	per cwt.	6s. 7s.
Portland cement.....	per cwt.	1s. 1s. 6d.
Paints ground in liquid or prepared for use; enamels.....	per cwt.	8s. 10s.
	or, if higher, ad val.	35% 55%
Varnishes, japans, lacquers, sizes, stains.....	per cwt.	3s. 6d. 4s. 6d.
	or, if higher, ad val.	35% 55%

\*Plus temporary surtax of 50 per cent of duty.

### Primage and Sales Tax

A Primage duty of 10 per cent ad valorem is imposed on most imports into Australia, but only 4 per cent on machinery, tools, certain electrical equipment, specified articles for use in manufacturing, and some other goods, and full exemptions on agricultural machinery and implements, seeds, fertilizers, insecticides, barbed wire, wire netting, mining machinery, fishing nets, vessels over 500 tons, specified medicines, books, and a few other items.

A Sales tax of 6 per cent is levied on imports, with some exemptions, chiefly agricultural implements and machinery, insecticides, seeds, fertilizers, wire for fencing, mining machinery and timber, kerosene, petrol, fuel oil for production of power, vessels, wireless valves, cigars, cigarettes, newsprint paper and bibles.

### Empire Content

Australian regulations respecting Empire content recognize three categories of goods. As applied to Canada these are:—(a) Goods "wholly produced or manufactured" in Canada; (b) Goods containing at least 75 per cent of Canadian labour and or material, in their factory or works cost; (c) Goods of a class not commercially manufactured in Australia provided they contain at least 25 per cent Canadian labour and or material. Only such goods as fall within one of these categories can qualify for tariff preference. The final process of manufacture must take place in Canada.

In the case of goods wholly manufactured in Canada, the manufacturer may use (1) basic raw materials of any origin and (2) raw materials in a more advanced stage, of any origin, but only if in their treatment no process has been performed abroad which is commercially performed in Canada. Various minerals, metals, textiles, fibres, and miscellaneous products, comprising over 100 items, are regarded as raw materials in this connection. The list is subject to change as conditions warrant. The manufacturer may apply for exemption in regard to a particular process or for any specified partially manufactured Australian material.

The 75 per cent Canadian content requirement covers all goods falling outside of category (a) and category (c) and includes a wide range of manufactured goods. This is the normal requirement for goods for which no other provision has been made.

Category (c) includes only those articles which are designated by the Australian customs authorities as not being commercially manufactured in Australia, and are consequently admitted to preference on basis of 25 per cent Canadian content. The list includes nearly all goods admitted duty free under the British Preferential tariff, and many other articles.

In computing total factory or works cost items included are:—(1) cost of materials as received into the factory but excluding any Canadian customs or excise duties; (2) manufacturing wages; (3) factory overhead expenses; (4) inside containers. Items excluded are: (1) outside packages and expenses of packing thereinto; (2) manufacturer's or exporter's profit, or profit or remuneration of any person dealing in the article in its finished condition; (3) royalties; (4) carriage, insurance, etc., from the place of production to the port of shipment; (5) any charges incurred subsequent to completing manufacture.

In calculating the value of the Canadian labour and/or material in goods not coming within category (a) the following only may be included: (1) materials of Canadian origin, but exclusive of any Canadian customs or excise; (2) manufacturing wages; (3) factory overhead expenses; (4) inside containers of Canadian origin. As to materials of mixed origin, even if the Minister permits a process to be done abroad the manufacturer must exclude the cost of that process as well as of any material not of Canadian origin.

### Value for Duty

Value for duty in Australia is the sum of:—(a) (i) the actual money price paid or to be paid for the goods by the Australian importer plus any special deduction; or, (ii) the current domestic value of the goods, whichever is the higher; (b) all charges payable or ordinarily payable for placing the goods free on board at the port of export; and (c) ten per cent of the amounts specified under (a) and (b). The ten per cent added in (c) is to cover, approximately, the ocean freight and related costs of transportation to Australia.

Current domestic value in (*a*) is the amount for which the exporter sells for cash, at the date of exportation, the same quantity of similar goods to any purchaser in the exporting country. The prices shown as current domestic values must be those quoted in the open market at the date of invoice for delivery for home consumption, and not necessarily the domestic values at the time when the export order was accepted. Where alteration in domestic value occurs between the date of the invoice and actual date of exportation, such change is to be shown:

Value for duty includes: (*a*) inland carriage and coastal freight; (*b*) cost of labour and materials (except outside packages) used in packing, including flock, kapok, straw, and other inside packing, except when flock, kapok, straw, or horsehair packing is separately invoiced, in which case the materials mentioned are dealt with under their appropriate tariff headings; (*c*) insurance to port of shipment; (*d*) canal dues; (*e*) royalty, payable on patent rights; (*f*) inland revenue duty, when the goods bear inland revenue duty stamps affixed to them in the country of export; (*g*) export duty. In the Canadian-Australian trade agreement (1931) the two countries agree that no greater amount of inland freight charges are to be included in the value for duty than the amount that would be incurred if the goods were forwarded from the point of origin of such goods to the nearest point of exit from the exporting country.

Charges not included in value for duty are:—(*a*) ordinary outside packages (including zinc linings and tarred paper); (*b*) agents' charges; (*c*) bank exchange; (*d*) buying or indent commission paid by the importer; (*e*) brokerage; (*f*) wharfage, dock dues, lighterage, cartage, craneage, special charges for stowage, etc.; (*g*) insurance—over-sea; (*h*) interest; (*i*) postage and petties; (*j*) sea freight—over-sea; (*k*) stamp duty on bills of lading; (*l*) cost of consular certificates; (*m*) inland revenue in the country of export—provided duty stamps are not affixed to the goods; (*n*) drawback of import duty on exportation to Australia; (*o*) drawback of excise duty in the country of export; (*p*) inspection fees. Special discounts to branch houses, or to agents by reason of agency existing, and any reductions in price for export, and not for home consumption, are not allowed in determining the value for duty.

Australian Primage duty is levied on the same basis as ad valorem duty. The Sales Tax is levied on the sum of (1) value for ordinary duty; (2) ordinary duty; (3) Primage duty; the total being increased by 20 per cent.

### New Zealand

Preferential duties on certain Empire commodities appeared in the first New Zealand tariff, that of 1811, but they were not maintained continuously during succeeding years. The Preferential and Reciprocal Trade Act, passed in 1903, favouring a limited number of Empire products, is regarded as the beginning of Imperial preference proper in New Zealand. Subsequent tariff enactments of 1907, 1921, 1927, and 1930 extended preference to more items and widened the margins between rates applicable to Empire and to foreign goods. In the trade agreement with the United Kingdom concluded at the 1932 Imperial Economic Conference, at Ottawa, New Zealand engaged to maintain all existing margins of 20 per cent ad valorem, or less, which United Kingdom goods then enjoyed over foreign goods, and also margins over 20 per cent except with the consent of the United Kingdom.



The present New Zealand tariff consists of two complete schedules of duties, British Preferential and General. Except where preference has been modified by special concessions to the Union of South Africa, or by trade agreements with Australia and with Canada, the British Preferential tariff applies to products or manufactures of the whole British Empire, including British Protectorates and any territory subject to a mandate from the League of Nations. All imports into New Zealand from non-Empire countries are subject to the General tariff.

#### Canadian-New Zealand Trade Agreement

A formal trade agreement between Canada and New Zealand to cover a period of one year was brought into force by proclamation as from May 24, 1932. It was extended on May 24, 1933, for a period of six months.

Articles I and II provide reciprocal exchange of British Preferential tariffs for goods not specified for other treatment. Article III interprets terms. The anti-dumping laws of both countries are suspended by Articles IV and V as regards each other's goods, with the proviso that if one country notifies the other that importation of any goods would injuriously affect producers or manufacturers of similar goods in the importing country and remedial measures satisfactory to the importing country are not put into effect by the exporting country within thirty days, the dumping law of the importing country may be applied. Article VI allows each country to levy special duties such as primage, excise, or surcharges, and Article VII enables each country, upon giving three months' notice to the other, to increase the rate of duty on any goods in the schedule. Article VIII applies the agreement to Western Samoa, and Article IX to Cook Islands.

Canada concedes rates lower than British Preferential on various articles of outstanding interest to New Zealand, and otherwise extends to her the British Preferential tariff. New Zealand grants her British Preferential rates to Canada except on tinned peas; silk and artificial silk hosiery; plaster-pulp sheets; some agricultural implements; electric stoves; and motor cars of less than 75 per cent Canadian content. On all these, however, she concedes rates lower than the General tariff. On lumber, laths, and shingles, where General and British Preferential rates were the same, New Zealand created a differential between the two schedules so as to afford Canada a preference on such products.

Schedule A (concessions by Canada) contains the chief products which New Zealand has for export. Schedule A is not comparable with Schedule B (concessions by New Zealand) because many of Canada's major exports to New Zealand are not in Schedule B, due to the fact that they receive British Preferential rates under another provision.

Schedule B, and also typical New Zealand rates where the British preference is accorded to Canada under the general provision of Article II, are given below.

Goods exempt from ordinary duty are subject to 3 per cent ad valorem Primage duty. Except as otherwise indicated, a surtax of  $22\frac{1}{2}$  per cent of duty is levied on imports from all foreign countries and on imports from Canada, Union of South Africa, Irish Free State, Newfoundland, and India.



## PREFERENCES UNDER SCHEDULE B

	British Preferential Tariff	General Tariff	Rate to Canada
Onions.....	£1	£4	£1
Preserved peas in tins.....	1d.	2½d.	1½d.
Salmon, potted and preserved.....	1½d.	3d.	1½d.
Other fish, potted or preserved (includes shell-fish, crustaceans, and other foods from fisheries).....	2d.	3d.	2d.
Apples and pears, fresh.....	1d.	1½d.	1d.
Calcium carbide.....	Free	Free.	Free
Gypsum, crude.....	Free	Free	Free
Socks and stockings of silk or artificial silk.....	2½%	50%	32½%
Fur skins, green or sun-dried.....	5%	5%	5%
Furs and similar skins dressed or prepared but not made up.....	25%	25%	25%
Footwear, including rubber soled canvas shoes.....	25%	50%	25%
Plaster-pulp sheets, plaster board, and similar building materials.....	10%	15%	35%
Plaster-of-Paris.....	Free	Free	Free
Paper-pulp, for the manufacture of paper.....	Free	Free	Free
Paper for fruit wrapping.....	Free	Free	Free
Paper, unspecified, in sheets 20 by 15 inches or larger.....	Free	10%	Free
Cultivators; harrows; ploughs; drills; sowers; seed or grain cleaners and separators.....	10%	35%	35%*
Unspecified agricultural implements, including ploughs, cultivators, and seed drills, handworked; ploughs, single furrow mould-board, not exceeding 266 lbs.; also certain parts of ploughs or harrows.....	Free	Free	Free
Electric cooking and electric heating appliances.....	20%	45%	30%
Laths and shingles.....	20%	30%	20%
Timber, rough sawn, not less than 25 feet long and having a minimum cross sectional area of not less than 150 square inches.....	7s. 6d.*	9s. 6d.*	7s. 6d.*
Other rough sawn timber.....	9s. 6d.*	11s. 6d.*	9s. 6d.*
Timber, sawn, dressed.....	19s.*	21s.*	19s.*
Motor cars.....	10%	40%	10% on cars 75% or more Canadian; 20% on cars 50% to 75% Canadian.
"Body duty" on passenger cars, when complete car is valued at not over £200.....	11½%	16½%	11½%
	(levied on the value of complete car)		
"Body duty" on passenger cars, when complete car exceeds £200 in value.....	11½%	16½%	11½%
	(levied on value of complete car up to £200)		
	6½%	8½%	6½%
	(levied on value of car in excess of £200)		

\*Surtax is 5% instead of the usual 2½%.

## NEW ZEALAND PREFERENCES UNDER ARTICLE II

	British Preferential Tariff	General Tariff
Motor car tires and inner tubes.....	10%	40%
Bicycle tires and inner tubes up to 1½ inches diameter.....	Free	20%
Leather belts and leather belting; leather unspecified.....	15%	25%
or, if higher, per lb.	3d.	5d.
Rubber or textile belting; hose, tubing, and piping, flexible, of canvas, rubber, or metal.....	Free	25%
Apparel and ready-made clothing, with some exceptions (see socks and stockings in Schedule B).....	27½%	50%
Piece-goods not containing wool or hair.....	Free	15%
Carpets, floor mats, floor rugs.....	25%	50%
Linoleum and similar floor coverings.....	20%	45%
Wrapping-paper, in sheets not less than 20 by 15 inches (or equivalent), or rolls not less than 10 inches wide, not lighter than ½ ounce per sheet of 20 by 15 inches.....	6s. 6d.	10s. 6d.
Paper, unspecified (includes printing) in sheets less than 20 x 15 inches (or equivalent).....	20%	40%
Paper, unspecified (includes newsprint) in sheets not less than 20 inches by 15 inches (or equivalent).....	Free	10%
Paper in rolls 10 inches and wider, unspecified (includes newsprint).....	Free	20%

## NEW ZEALAND PREFERENCES UNDER ARTICLE II—Concluded

	British Preferential Tariff	General Tariff
Cardboard, pasteboard, wood-pulp board, corrugated board, fibre-board, and straw-board, less than 20 x 15 inches (or equivalent) and weighing less than 1½ ounces per sheet 20 x 15 inches (or equivalent).....	ad val.	45%
Paperhangings.....	Free	25%
Account books, invoice forms, and various other kinds of stationery.....	ad val.	50%
Unspecified stationery.....	ad val.	45%
Iron, galvanized or plain black, viz.: angle, tee, bar, bolt, channel, rod, and rolled girders; iron girders expanded, but otherwise unworked.....	ad val.	Free
Copper plate and sheet.....	ad val.	Free
Metal cordage, not being gold or silver.....	ad val.	Free
Wire, plain; barbed fencing wire; wire cut to lengths, looped, twisted, or plain, suited for baling and similar purposes.....	ad val.	Free*
Ran water, soil, and similar pipes (including cast-iron pipes of nominal diameter not over five-sixteenths inch).....	ad val.	20%
Wrought iron pipe, screwed; and boiler tubes.....	ad val.	Free
Wrought iron or wood pipe not over 6 inches, internal diameter.....	ad val.	Free
Certain pipe fittings of brass or other copper alloy or cast iron.....	ad val.	20%
Rails for railways or tramways, including layouts, points, crossings, fish-plates, creep clips, tie irons, bearing-brackets, bed-plates, cast-iron chocks, and bored iron bars.....	ad val.	Free
Traction engines and tractors.....	ad val.	Free*
Engines, gas and oil, for cycles, motor vehicles, traction engines, etc., etc.....	ad val.	10%
Parts of engines.....	ad val.	Free-25%
Portable steam engines on wheels, with boilers of locomotive type, road-rollers, self-propelled.....	ad val.	Free
Weighing machines, scales, and balances, unspecified in the tariff.....	ad val.	20%
Windmills.....	ad val.	20%
Incubators for poultry raising.....	ad val.	20%
Axes, hatchets, spades, shovels, forks, picks, and other tools, and saws, except shears, reaping hooks, butchers' and other cleavers and choppers, saws.....	ad val.	Free
Plain iron nails or tacks, over 1 inch long, and dog spikes.....	per ton	£2
Unspecified nails and tacks.....	ad val.	Free
Bolts and bolt ends, up to 24 inches in length, including insulating bolts, unspecified nuts, blank or screwed; staples; metal threaded screws, screws for wood; rivets and washers.....	ad val.	Free
Radio sets in cabinets.....	ad val.	10%
Vacuum cleaners.....	ad val.	Free
Electric insulators.....	ad val.	25%
Electric motors.....	ad val.	Free
Electric meters.....	ad val.	Free
Machinery and many kinds of electrical appliances and apparatus.....	ad val.	Free-20%
Hardware and ironmongery, unspecified.....	ad val.	20%
Tinware and tin manufactures, unspecified.....	ad val.	25%
Wooden furniture and cabinetwork, unspecified.....	ad val.	25%
Woodenware and turnery, unspecified.....	ad val.	20%
Veneers, plywood.....	ad val.	20%
Pianos and phonographs.....	ad val.	20%
Brushes, brushware, and brooms.....	ad val.	25%
Optician's materials.....	ad val.	Free
Toilet preparations and perfumery, unspecified.....	ad val.	35%
Soap, all kinds.....	ad val.	25%
White lead, ground in oil.....	per cwt.	6s.
Paints, various, as defined.....	ad val.	20%
Jams, jellies, marmalade and preserves.....	per lb.	2d.
Jellies, concentrated.....	per lb.	4d.
Pickles.....	per gal.	3s.
Salt.....	per ton	Free
Provisions, unspecified.....	ad val.	20%
Fruits, preserved in juice or syrup (non-alcoholic).....	ad val.	25%
Confectionery.....	ad val.	30%
Macaroni and vermicelli.....	ad val.	Free

\*Exempt from primage duty.

\*\*Surtax is 5% instead of usual 2½%.

†Applicable only to Canada, Union of South Africa, Irish Free State, Newfoundland and India; rate to other British countries, 27½%.

## Sales Tax

New Zealand inaugurated a sales tax of 5 per cent ad valorem, applicable to imports, on February 8, 1933. Exemptions include, among other articles:—Agricultural and dairying machinery and equipment, fertilizers, disinfectants and insecticides, stock and poultry foods, wheat flour, hides and skins, mining machinery, explosives, sewing machines, specified manufacturing machinery,

electric motors, electric power and light machinery, tractors, flying machines and engines therefor, barbed wire, wire netting, motor spirits, newsprint paper, wrapping paper, printed books and papers, cellophane, films, cigarettes, calcium carbide, lime, and ships. Sales tax is levied on the duty paid value of imports as increased by 25 per cent thereof.

### Empire Content

Classes of goods deemed by New Zealand to be the produce or manufacture of countries whose goods are entitled to Empire preference are:—1. Wholly the produce of such countries; 2. Wholly the manufacture of such countries from materials produced therein; 3. Wholly manufactured in such countries from non-Empire raw material or certain partly processed non-Empire raw material; 4. Partially produced or partially manufactured in such countries to the extent of at least 50 per cent of the factory or works cost; 5. Manufactured tobacco produced or manufactured in Canada, the Union of South Africa, the Irish Free State, Newfoundland, or India, requires 75 per cent content of these countries; 6. By provision of the Trade Agreement, Canadian motor cars are accorded British preferential rates when having at least 75 per cent Canadian content, and intermediate rates when having 50 per cent to 75 per cent Canadian content.

As regards class (3), the list of partly processed non-Empire raw materials includes such articles as abrasives, asbestos, asphalt, numerous chemicals and dyes, textile fibres, precious stones, refined gums and resins, hides and skins, meats and fish, various metals (in matte, concentrates, pigs or ingots), essential oils, rubber (crude or crepe), raw sugar and molasses, timber (hewn or rough-sawn), and wood pulp. Examples given of unmanufactured raw materials for the purpose of these regulations are ores, grains, greasy wool, unwrought logs, raw skins, and various other natural products.

In the calculation of the proportion of produce or labour of the country entitled to preferential treatment for the purposes of class (4), (5) and (6), none of the following items is to be included:—(a) manufacturer's profit, or the profit or remuneration of any trader, agent, broker or other person dealing in the article in its finished condition; (b) royalties; (c) the cost of outside packages or any cost of packing the goods into the outside packages; (d) any cost of conveying, insuring or shipping the goods subsequent to their manufacture.

Customs duty paid on imported material is disregarded in computing both the total value and the British content.

In calculating the percentage of British content in value of manufactured goods, all processes carried out within countries entitled to preferential treatment may be aggregated and treated as British. For example, an article might be partially manufactured in a foreign country and partially in England, the final process being performed in Canada. In such a case, the expenditures on material and/or labour in England and Canada are added together, in the computation of the British content.

### Value for Duty

The New Zealand Customs Act provides that duty imposed according to value is to be on the current domestic value of the goods when sold for cash in the ordinary course of business, for home consumption, in the principal market of the exporting country, at the time of exportation, with 10 per cent added.

The 10 per cent is to cover the approximate cost of transportation to New Zealand. Where so indicated in the tariff, current domestic value is ascertained by reference to value at port of export in duty of principal markets. The fair market value in the country of export prevails whether higher or lower than the export price.

Deduction is allowed from the current domestic value of any drawback of import or excise duty on goods, materials, or ingredients used in making goods, or any import or excise duty actually paid in the exporting country, or which would have been payable if the goods had been entered there for home consumption instead of export. No deduction is allowed from the current domestic value because of any special or sample discount, special arrangement concerning export, exclusive right to sale within certain territorial limits, royalty payable on patent rights but not on goods exported, or on account of any other special reduction in price.

The Minister of Customs has special powers over valuation when, in his opinion, it is "difficult, inequitable, or impracticable" to determine the value of goods. In the case of foreign products or manufactures of a class or kind produced in any part of the British Empire the Minister may fix a value, whether true current domestic value or not, if in his opinion the importation of such goods would otherwise be likely to prejudicially or injuriously affect any industry or business in New Zealand or elsewhere in the British Empire. The value so determined is to be such that the cost of the goods to the importer, including duty, does not exceed by more than 20 per cent the cost of similar goods, including duty, imported from some part of the British Empire.

### Union of South Africa

While preferences were granted to British goods in the Cape Colony for a long period prior to 1855 and the Dominion of Natal, in operation from April 22, 1897, to August 3, 1902, was annexed to the South African Republic, on account of a British annexation treaty. Exchange of tariff preferences between Canada and the territory now constituting the Union of South Africa may be said to date from 1904.

The Cape of Good Hope, Natal, the Transvaal (formerly South African Republic), Orange River Colony, and Southern Rhodesia, as members of a Customs Union Convention in 1906, entered a rebate of duties on United Kingdom goods, and agreed to extend the rebate to other parts of the Empire on a reciprocal basis. Reciprocal exchange of preferences between Canada and South Africa came about in consequence of a Canadian Order in Council of July 1, 1904, which extended the British preferential rates, then one-third lower than the general tariff, to these members of the Customs Union.

The aforementioned South African areas received the benefit of the entire British preferential schedule to the Canadian Tariff Act of 1907. In addition a rate of 55 cents per gallon was conceded on non-sparkling wines up to 40 per cent of proof spirit when the produce or manufacture of any British colony or territory in the South African Customs Union Convention.

In 1910 the Cape of Good Hope, Natal, the Transvaal, and the Orange River Colony were constituted the Union of South Africa. The Union granted British preferential rebates, usually of 3 per cent ad valorem, until 1925, when a new tariff structure was adopted.



### **Maximum-Minimum System Adopted**

The tariff system of 1925 provides two columns of duties, maximum and minimum. The maximum (on some items, same as minimum) is the ordinary or general tariff and applies to imports, except where preferential rebates have been granted. The 1925 Act gave rebates to the United Kingdom on 24 items; to Canada on 12 items; to New Zealand on 5 items; to Australia on 4 items (withdrawn July 1, 1926).

### **South African Agreements of 1932**

At the Imperial Economic Conference in Ottawa, the Union of South Africa entered into formal trade agreements with the United Kingdom, Irish Free State, and Canada. The agreement with the United Kingdom increased the number of preference items as well as creating some larger margins of preference in return for continued free entry of South African goods into the United Kingdom and some guarantees of stabilized margins of preference. The Union of South Africa gave the Irish Free State specified margins of preference on hosiery, tractors, and stout, in exchange for preference margins on dried and canned fruit, maize meal, and wines.

### **Canadian-South African Agreement of 1932**

The first formal trade agreement between Canada and the Union of South Africa was signed at Ottawa on August 20, 1932. Schedule A of this agreement contains 46 items on which Canada agrees to apply to South African goods either free entry, specified rates (some seasonal), or British preferential rates. There is a guarantee on scheduled goods of lowest rates (excluding concessions to British West Indies) and maintenance of margins of existing preference against foreign goods.

### **South African Concessions to Canada**

In the new trade agreement Canada retains former margins of preference on wheat, flour of wheat, hosiery, binder twine, iron and steel pipes and fittings, electric cooking and heating apparatus, mechanics' tools, white lead, tires and tubes, newsprint, and unmanufactured wood, and an increase in the former preference granted on canned salmon and sardines and on unmanufactured soft wood. New preferences are obtained on apples, elevating machinery, electric vacuum cleaners, electric batteries, rubber soled canvas shoes, garden hose, mosquito netting, shingles, citrus fruit packing boxes, and ice chests. The group of items on which Canada is guaranteed the lowest rate of duty—that is to say, any preference that might be created, would be given to Canada—are tinned vegetables, cash registers, non-skid chains, agricultural implements, cream separators, toilet preparations, boots and shoes, wooden handles, flooring, various classes of paper and board, also motor vehicles. As regards motor vehicles there is already a concession in respect of customs valuation. The current domestic value in the exporting country is the normal value for duty in South Africa but under the agreement a deduction is allowed from the home consumption price in Canada of the amount of any Canadian duty drawback allowed on export.

The South African rates of duty on items on which there is now a margin of preference are shown in the appended list. The minimum tariff in each case applies to Canada.

	Minimum Tariff	Maximum Tariff
Wheat in the grain..... per 100 lbs.	2s. 6d.	2s. 8d.
Wheat flour..... per 100 lbs.	5s. 4d.	5s. 8d.
(Rate adjusted to keep landed cost up to 18s. 6d. per 100 lbs.)		
Unspecified tinned fish..... per lb.	3d.	2½d.
Fresh apples..... ad val.	*Free	5%
Socks and stockings..... ad val.	10%	15%
Binder twine..... ad val.	Free	5%
Cranes, mechanical excavators and loaders, winches not being for whaling, trawling, or mining purposes, hoisting crabs, chain blocks, spiral chutes, gravity conveyors and shears.....	3	10%
Bucket conveyors and conveyor belts and lifting apparatus of industrial use..... ad val.	3%	10%
Mechanical storage lifting apparatus..... ad val.	5%	10%
Vacuum cleaners, electric..... ad val.	10%	20%
Electric batteries..... ad val.	Free	1s.
Wrought iron or steel pipes and tubes not riveted..... per 100 lbs.	Free	8d.
Cast iron pipes and tubes..... per 100 lbs.	15%	20%
Down-piping and guttering, and riveted wrought-iron or steel pipes and tubes..... ad val.	Free	5%
Unspecified cocks and taps, and meter and pipe fittings..... ad val.	15%	20%
Cisterns..... ad val.	Free	3s.
Water meters for house connections..... each	15%	20%
Electrical heating and cooking appliances..... ad val.	Free	3%
Mechanics' tools..... ad val.	6s.-10s.	7s.-11s.
White lead, dry and ground in oil..... per 100 lbs.	30%	30%
Canvas shoes, rubber soled, adult sizes..... ad val.	or, if higher, per pair	2s. 6d.
Plain rubber garden hose..... per lb.	2½d.	3d.
Armoured rubber garden hose..... per lb.	1½d.	2d.
Rubber pneumatic tires..... per lb.	10d.	1s.
Rubber tubes for motor cars..... per lb.	6d.	7½d.
Rubber tubes for motor cycles and cycles..... per lb.	10d.	1s.
Rubber tires, solid..... per lb.	2d.	3d.
Wooden boxes or shooks for packing citrus fruits..... ad val.	Free	5%
Ice chests, metal..... ad val.	15%	20%
Ice chests, wooden..... ad val.	20%	25%
Shingles..... ad val.	20%	30%
Unmanufactured soft wood (Coniferous)..... per 100 cubic feet	Free	9s.
Unmanufactured wood, other than soft wood..... ad val.	Free	3%
Newsprint..... ad val.	Free	5%
Wire gauze (mosquito and fly)..... ad val.	15%	20%

\* Applicable to Canada from October 1 to December 31, each year.

### Territories under Union Tariff

The mandated territory of South-West Africa, as well as the port and settlement of Walvis Bay, is part of the Union for the collection of customs duties. The Union tariff is also in force in the native territories of Basutoland, Bechuanaland, and Swaziland, which are under direct Imperial control.

### Empire Content

Manufactured goods in respect of which the Union of South Africa allows a preferential tariff rebate must be either wholly manufactured in the country entitled to preference or if partially manufactured therein, at least 25 per cent of the factory cost of the article in its finished state must be represented by the products and labour of such country.

The factory cost includes the cost of materials as received into the factory (but not customs or excise or other duty in respect of such materials), manufacturing wages, factory overhead expenses, inside containers. The factory cost does not include:—Outside packages and expenses of packing thereinto; manufacturer's or exporter's profit, or the profit or remuneration of any trader, broker, or other person dealing in the article in its finished manufactured condition; royalties; carriage, insurance, etc., from place of production or manufacture to port of shipment; any other charges incurred subsequent to manufacture of the goods.

In calculating the value of labour and material for determining eligibility to preference the following items only may be included:—Materials so far as they originate in the preference country, but not including any excise or other duty paid or payable; manufacturing wages; factory overhead expenses; inside containers of the origin of the preference country. Where goods have entered into the commerce of, or undergone a process of manufacture in, a foreign country only that labour and material added after their return to the preference country is allowed in calculating the proportion of labour and material of the preference country.

The final process of manufacture must take place in the country entitled to preference and the goods must be consigned therefrom to the Union of South Africa.

#### **Value for Duty**

The value of goods for purposes of duty in the Union of South Africa is the domestic value, plus the extra cost of packing and packages for export, carriage to the port of shipment and all other expenses incidental to placing the goods on board ship ready for exportation but in no case less than the free on board price of the goods to the importer, including agents' or buying commission in excess of five per cent.

Domestic value is the market price at which at the time of exportation, goods are offered for sale for consumption in the principal markets of the exporting country to all purchasers in the usual wholesale quantities, in the ordinary course of trade, including the cost of ordinary packages but not including excise duties payable in that country.

In the case of goods exported in bond or subject to drawback, the "current domestic value" is the duty-paid domestic value and not the in-bond value or the domestic value less drawback. Stamp duty, luxury tax or other internal imposts are not to be included in the current domestic value, nor are such charges as wharfage, dock dues, lighterage, cartage, craneage, etc., to be included.

### **Rhodesia, Southern and Northern**

#### **The Rhodes Clause**

Tariff preferences on British goods in Southern Rhodesia and the Zambesi Basin of Northern Rhodesia, as well as level of duties, have been influenced by what is known as the Rhodes Clause. This clause, as Article 47 of the Southern Rhodesian Order in Council of 1898, and Clause 19 of the Northern Rhodesian Order in Council of 1911, was as follows:—

No customs duties levied on any articles, other than tobacco in any form and intoxicating liquors of any kind, produced or manufactured in any part of His Majesty's dominions, or in any British protectorate, and imported into Southern or Northern Rhodesia (as the case may be), shall exceed in amount the duties levied on similar articles from overseas according to the tariff in force in the South African Customs Union at the date of coming into operation of the Southern Rhodesian Order in Council, 1898, or the tariff contained in the Customs Union Convention concluded between the Colony of the Cape of Good Hope, the Orange Free State, and Natal, in May, 1898, whichever are the higher.

This Article was revoked in "Southern Rhodesia (Customs) Amendment Order in Council, 1914." The 1914 amendment was repealed by the "Customs and Excise Amendment Act, 1931," but this Act provided for preferences to reciprocating British Dominions, Possessions and Protectorates, in respect of certain commodities specifically enumerated in a Schedule annexed to the Act. Finally the "Customs and Excise Amendment Act, 1932," repealed the "Rhodes Clause," but the principle thereof was maintained in the Tariff.

### Preferences in the Rhodesias

In the whole of Southern Rhodesia there are Empire tariff preferences—one schedule for the United Kingdom and other reciprocating parts of the Empire, and another schedule containing reduced duties on some goods coming from non-reciprocating British possessions. It is important to note that Canada, by Order in Council of July 1, 1904, extended the benefits of her British preferential tariff to Southern Rhodesia, and in the Customs Tariff Act of April 12, 1907, included Southern Rhodesia among the countries entitled by statute to the British preferential tariff. Southern Rhodesia, therefore, has all along regarded Canada as a reciprocating British possession. The Southern Rhodesian Government Gazette of February 1, 1929, contained a notice to the effect that Canada, New Zealand, Irish Free State, Fiji Islands, British Guiana, Barbados, British Honduras, Windward Islands, Trinidad and Tobago, and Cyprus were regarded as having granted equivalent special privileges to Southern Rhodesia and consequently entitled to the rebate of customs duties provided for reciprocating parts of the Empire.

Northern Rhodesia has two custom zones. The area known as the Congo Basin zone is part of territory for which an open-door policy, that is equality of trade for all nations, was established by the Berlin Act of 1885. In this portion of Northern Rhodesia, therefore, non-British goods enter at the same rate of duty as British goods. The zone of Northern Rhodesia known as the Zambesi Basin has in force, like Southern Rhodesia, a preferential tariff for the United Kingdom and other reciprocating British possessions and reduced duties on some articles coming from non-reciprocating British areas. Canada is recognized as reciprocating having granted her British preferential tariff to Northern Rhodesia by Order in Council of January 25, 1913.

### Trade Agreement with Southern Rhodesia

A formal trade agreement was entered into between Canada and Southern Rhodesia on August 20, 1932, at the conclusion of the Imperial Economic Conference in Ottawa. This agreement contains exchange of British preferential rates between the two Dominions, with minor exceptions, and also contains schedules of special reciprocal concessions. Canada Schedule A grants duty free entry to Southern Rhodesia on Indian corn (not for distilleries), grapefruit imported direct, oranges, lemons, and limes, and guarantees the same tariff treatment on peanuts, green in the shell, as will be accorded to Australia. Schedule B of this agreement stipulates special preferences to Canada on cream separators, electrical batteries, boots and shoes, packing boxes empty or in shooks, unmanufactured wood, ceiling and flooring boards, newsprint, plain or composite paper, and wrapping paper. The following table sets forth the rates, preferential and general, on these articles and on some others of interest to Canada:—

	Rate to Reciprocating British Possessions (includes Canada)	Rate to Non- reciprocating British Possessions	Rate to Foreign Countries
Motor cars, motor charabancs and omnibuses. . . . . ad val.	15% (a)	20%	25%
Motor trucks and motor vans and chassis of all the aforementioned vehicles imported for bodies to be built in Southern Rhodesia. . . . . ad val.	Free	Free	5%
Spare parts and accessories of motor cars, motor charabancs and omnibuses (excluding tires, tubes and electric lamp bulbs) . . . . . ad val.	15%	20%	25%



	Rate to Reciprocating British Possessions (includes Canada)	Rate to Non- reciprocating British Possessions	Rate to Foreign Countries
Accessories of motor trucks and vans..... ad val.	10%	10%	20%
Pneumatic rubber tires..... per lb.	9d. (a)	1s.	1s.
Tubes for motor cycles and cycles..... per lb.	9d. (a)	1s.	1s.
Tubes for motor vehicles other than cycles..... per lb.	6d. (a)	7½d.	7½d.
Solid rubber tires..... per lb.	2d.	2d.	3d.
Wheat..... per 100 lbs.	1s. (b)	1s. 2d. (b)	1s. 2d. (b)
Wheat flour..... per 100 lbs.	2s. 3d. (b)	2s. 6d. (b)	2s. 6d. (b)
Cyanide of sodium..... ad val.	Free	Free	5%
Fish, preserved..... per lb.	1d.	1½d.	1½d.
Apples..... ad val.	Free	Free	5%
Condensed milk..... per 100 lbs.	4s. 2d.	4s. 2d.	5s. 2d.
Confectionery..... per lb.	3d.	3d.	4½d.
Newsprint in reels or in the flat..... ad val.	10%	20%	30%
Wrapping paper, including browns, casings, sealings, nature or ochre browns, sulphites, krafts, and bag papers, in original mill wrappers, or in sheets, or in rolls, when weighing at a size of 29 by 45 inches or its equivalent at least 30 lbs. per ream of 480 sheets..... ad val.	Free	Free	10%
Unspecified plain or composite paper, in the original mill wrappers, flat or folded, not less than 16 inches by 15 inches..... ad val.	Free	Free	10%
Paper in reels, including paper in reels for monotype machines..... ad val.	Free	Free	10%
Wrapping paper for packing fresh fruit..... ad val.	Free	Free	10%
Wood, unmanufactured..... ad val.	Free	Free	10%
Wooden frameworks of houses, including among other kinds window frames, sills and sashes, doors and staircases..... ad val.	10%	10%	20%
Wooden boxes: empty or in shooks for packing..... ad val.	Free	Free	10%
Boots and shoes of rubber, or boots and shoes the soles of which are wholly or partly of rubber..... ad val.	10%	10%	10% plus 1s. per pair
All other boots and shoes..... ad val.	10%	10%	25%
Electrical batteries..... ad val.	5%	5%	20%
Cream separators..... ad val.	Free	Free	15%
Bands and belting of all kinds for driving machinery..... ad val.	Free	Free	5%
Machinery, apparatus, appliances and implements, for agricultural purposes..... ad val.	Free	Free	5%
Cutlery, plain..... ad val.	10%	10%	30%
Hardware..... ad val.	10%	10%	20%
Typewriters and parts..... ad val.	10%	10%	25%
A wide range of other merchandise..... ad val.	10%	10%	20%

(a) Ten per cent ad valorem on motor cars and chassis; 6d. per lb. on rubber tires and on tubes for motor cycles and cycles; 3d. per lb. on tubes for motor vehicles, wholly manufactured in Great Britain or Northern Ireland.

(b) Government Notice of October 26, 1928, states that duty is refunded on wheat imported by bona fide millers for blending purposes, provided resulting flour or meal contains at least 20 per cent of Southern Rhodesia products. Law of June 10, 1933, empowers Governor to double duty on wheat flour and restrict importation of wheat.

#### Preferences in Northern Rhodesia (Zambesi Basin)

	British Preferential Tariff	General Tariff
Motor cars and parts..... ad val.	10%	20%
Motor trucks and vans..... ad val.	Free	10%
Rubber tires..... per lb.	6d.	1s.
Rubber tubes for motor cars..... per lb.	3d.	7½d.
Tubes for motor cycles and cycles..... per lb.	6d.	1s.
Rubber boots and shoes, or boots and shoes the soles of which are wholly or partly of rubber..... ad val.	10%	10% plus 1s. per pair

The duties on most other goods entering the Zambesi Basin of Northern Rhodesia (preferential zone) are the same as those in force in Southern Rhodesia.

In the Congo Basin of Northern Rhodesia the rates of duty on goods from all countries are those of the British preferential tariff of the Zambesi Basin.

### Empire Content and Dutiable Value

The regulations governing proportion of content of the preference country required in manufactured goods in order that they qualify for preference are the same in Southern and Northern Rhodesia as in the Union of South Africa.

Value for duty is also determined in the same manner in each of these areas.

### British West Indies

The British preference established in Canada by the Tariff Act of 1898 and continued in amended form under the Tariff Act of 1907, was made applicable on each occasion to the British West Indies, Bermuda, and British Guiana, and was extended by Order in Council to British Honduras in 1913.

Canada, in 1912, entered into a formal trade agreement with some of the West Indies, obtaining preferential rates of four-fifths of the General tariff on certain Canadian goods in exchange for corresponding reductions on some West Indian products entering Canada. In 1920 a second trade agreement, broader both as to extent of the preferences exchanged and the number of West Indian signatories, superseded the first. The 1920 agreement was replaced on July 6, 1925, by one more extensive, which was brought formally into force by proclamation as from April 30, 1927, and is for a twelve-year period.

### Canadian Concessions in 1925 Agreement

Under the 1925 agreement Canada grants the British West Indian Colonies: (a) specific amounts of preference on sugar and some other tropical products; (b) a 50 per cent reduction from the General tariff on goods for which no special provision is made.

### West Indian General Preferences

The following table sets forth the amount of preference, guaranteed by the colonies in this agreement, for goods not specially dealt with, as well as a list of what may be called typical or prevailing rates in force:—

Name of Colony	Preference Guaranteed	General Tariff	British Preferential Tariff
Trinidad and Tobago.....	50%	20% ad val.	10% ad val.
Barbados.....	50%	20% ad val.	10% ad val.
Jamaica.....	50%	20% ad val.	15% ad val.
Bahamas.....	25% (a)	20% ad val.	10% ad val.
Windward Islands—			
Grenada.....	33½%	22½% ad val.	15% ad val.
St. Lucia.....	33½%	22½% ad val.	15% ad val.
St. Vincent.....	33½%	15% ad val.	10% ad val.
Leeward Islands—			
Antigua.....	33½%	15% ad val.	10% ad val.
Dominica.....	33½%	15% ad val.	10% ad val.
St. Kitts-Nevis.....	33½%	15% ad val.	10% ad val.
Montserrat.....	33½%	15% ad val.	8% ad val.
Virgin Islands.....	33½%	12% ad val.	8% ad val.
Bermuda.....	Removal of surtax (b)	12½% ad val.	10% ad val.
British Guiana.....	50%	33½% ad val.	16½% ad val.
British Honduras.....	33½% (c)	20% ad val.	10% ad val.

(a) Bahamas in pursuance of assurance given in the 1925 trade agreement and a proposal in the Canada-United Kingdom Agreement of 1932, increased this percentage to 50 per cent.

(b) Bermuda surtax was 10 per cent of duty up to December 31, 1928, when it was increased to 25 per cent.

(c) British Honduras in practice gives 50 per cent preference.

\*Some shown in an appended table, for the larger colonies.

Although there are many exceptions\* to these rates in all the colonies, the aforementioned table applies to a wide range of goods which in most of the tariffs would include:—Apparel; bags (travelling and tool), trunks, and valises; baskets; blacking and polishes; blue; brooms and brushes; buckets, pails, and tubs; bicycles and tricycles; chinaware, porcelain, earthenware, and pottery; clocks and watches; cutlery; furniture; glass and glassware; grease; gums; haberdashery and millinery; hats and bonnets; medicines (with some exceptions); musical instruments; oilcloth and linoleum; pickles, condiments, and sauces; spices; saddlery and harness; ships, boats, and launches; stationery; toys and games; umbrellas and parasols; wax. Subject to the same rates there are also comprehensive items for goods not otherwise provided for, being manufactures of cotton, linen, wool, silk, jute, hemp, leather, india-rubber and gutta-percha, metal, wood, and all unenumerated goods.

#### West Indian Scheduled Preferences

Trinidad, Barbados, Jamaica, Bahamas, British Guiana, and British Honduras in the 1925 agreement guaranteed a preference of 2 shillings (formerly 1 shilling) per barrel of 196 pounds on flour. The Leeward Islands (Antigua, Dominica, Montserrat, St. Kitts-Nevis, and Virgin Islands) and the Windward Islands (Grenada, St. Lucia, and St. Vincent) undertook to use their best endeavours to similarly increase the flour preference, and this has been done by practically all these colonies.

Trinidad, Barbados, and British Guiana give a preference of not less than 66 $\frac{2}{3}$  per cent with a guaranteed specific amount as indicated on: apples (50 cents per barrel); beef and pork, salted and pickled (\$1.50 per barrel of 200 pounds); butter,\* cheese, and lard (\$1.50 per 100 pounds); fish, canned, preserved, dried, salted, smoked or pickled (2s. per 100 pounds); confectionery (4 cents per pound); prepared cocoa (4 cents per pound; 2 cents in Barbados); condensed milk\* (1s. per case of 48 pounds); cordage (6s. per 100 pounds); cement (2s. per cask of 400 pounds). The preferences in these colonies are 66 $\frac{2}{3}$  per cent on boards,\* planks,\* scantling,\* shingles, and lath (not of pitch pine), and on boots\* and shoes.\* The Leeward Islands and the Windward Islands also agreed to endeavour to grant these preferences, and many new tariff advantages to Canada have been accorded on this account.

Jamaica, the Bahamas, and British Honduras agreed to preferences of not less than 50 per cent on butter,\* cheese, lard, condensed milk,\* meats of all kinds, fish (canned, preserved, dried, salted, smoked or pickled), apples, and potatoes.\*

#### Spirits, Wines and Tobaccos

Tobacco, cigars, and cigarettes are excepted from the list of merchandise on which any of the colonies are bound to give preference. The Bahamas also excepted wines, malt liquors, spirits, spirituous liquors, liquid medicines and articles containing alcohol, while Bermuda excepts wines, spirits, and malt liquors. The other colonies agreed to certain specified preferences on spirits, wine, beer and ale. Preferences, however, are in some cases beyond the requirements of the agreement. Tobacco, cigars, cigarettes, and spirituous or alcoholic liquors are excepted from the preference list on the Canadian side.

\*Preference further increased or adjusted at 1932 Imperial Economic Conference.

## FURTHER LIST OF CUSTOMS DUTIES IN JAMAICA, TRINIDAD, BARBADOS AND BRITISH GUIANA

Product	Jamaica		Trinidad		Barbados		British Guiana	
	British Protective Tariff	General Tariff	British Protective Tariff	General Tariff	British Protective Tariff	General Tariff	British Protective Tariff	General Tariff
Apples.....	10%	20%	Free	2s. 1d.	Free	2s. 1d.	65c.	\$1.95
Bananas.....	8s. 4d.	16s. 8d.	1s. 0d.	2s. 0d.	0s. 6d.	2s. 0d.	32c.	\$1.04
Wheat.....	7s. 0d.	14s. 0d.	1s. 6d.	3s. 6d.	0s. 9d.	5s. 9d.	\$1.25	74
Flour of wheat.....	per 100 lbs.	per 100 lbs.	1s. 6d.	3s. 6d.	0s. 9d.	5s. 9d.	32c.	65c.
Oats.....	1s. 6d.	2s. 0d.	0s. 9d.	1s. 6d.	0s. 7d.	1s. 4d.	18c.	
Oilcake.....	1s. 10d.	2s. 0d.	0s. 9d.	1s. 6d.	0s. 7d.	1s. 4d.	18c.	
Sugar, refined.....	6s. 3d.	8s. 4d.	4s. 0d.	8s. 0d.	8s. 4d.	16s. 8d.	30%	\$7.80
Confectionery.....	ad val.	25%	10%	30%	10%	30%	20%	60%
Butter.....	15s. 0d.	30s. 0d.	4s. 2d.	16s. 8d.	7s. 6d.	20s. 0d.	\$1.95	\$5.85
Cheese.....	8s. 4d.	16s. 8d.	2s. 1d.	8s. 4d.	8s. 4d.	25s. 0d.	\$1.95	\$5.85
Milk, condensed.....	1s. 6d.	plus 10%	0s. 6d.	2s. 0d.	Free	2s. 0d.	5%	15%
Bacon and ham.....	per 100 lbs.	ad val.	4s. 2d.	8s. 4d.	4s. 2d.	8s. 4d.		
Bird and pork, pickled or salted.....	per 100 lbs.	25s. 0d.	1s. 0d.	4s. 2d.	1s. 0d.	4s. 2d.		
Lard.....	per 100 lbs.	11s. 4d.	12s. 0d.	50s. 0d.	2s. 1d.	8s. 4d.		
Lard substitutes.....	per 100 lbs.	12s. 0d.	23s. 0d.	10s. 0d.	2s. 1d.	8s. 4d.		
Codfish, dried.....	per 100 lbs.	17s. 0d.	2s. 1d.	6s. 3d.	1s. 4d.	1s. 10d.		
Mackerel, pickled.....	per 100 lbs.	4s. 0d.	2s. 1d.	6s. 3d.	0s. 7d.	1s. 10d.		
Fish, canned.....	per 100 lbs.	20%	2s. 1d.	6s. 3d.	0s. 7d.	1s. 10d.		
Hardware.....	ad val.	25%	10%	20%	10%	20%		
Electrical apparatus.....	ad val.	15%	10%	20%	10%	20%		
Soap, common.....	per 100 lbs.	3s. 6d.	2s. 0d.	20s. 0d.	1s. 6d.	2s. 0d.		
Soap, fancy.....	ad val.	15%	10%	20%	10%	20%		
Calcium carbide.....	ad val.	15%	10%	20%	10%	20%		
Rubber or gutta-percha.....	ad val.	15%	10%	20%	10%	20%		
Other boots and shoes.....	ad val.	15%	10%	20%	10%	20%		
Cordage.....	per 100 lbs.	20s. 10d.	10%	30%	10%	30%		
Newsprint.....	per 1,000 ft.	6s. 9d.	5s. 0d.	13s. 0d.	Free	12s. 6d.		
Lumber, sawn or hewn, undressed.....	per 1,000 ft.	plus 10%	ad val.	ad val.	ad val.	ad val.		
Lumber, sawn or hewn, dressed.....	per 1,000 ft.	10s. 6d.	6s. 3d.	16s. 8d.	3s. 0d.	13s. 0d.		
Cement.....	per 400 lbs.	1s. 0d.	0s. 6d.	2s. 8d.	1s. 6d.	4s. 6d.		
If not Government standard.....		3s. 0d.						



### West Indian Surtaxes

Import duties in British West Indian colonies are usually subject to a surtax. This surtax is 25 per cent of duty in St. Lucia, St. Kitts-Nevis, and Montserrat; 10 per cent of duty in Trinidad and Tobago and Barbados; 20 per cent of duty in Antigua;  $17\frac{1}{2}$  per cent of duty in St. Vincent; 15 per cent of duty in Dominica; 5 per cent of duty in Grenada; 2 per cent of duty in Virgin Islands; 3 per cent ad valorem in British Guiana; tax of 1 shilling per package in Jamaica; tax of 5 cents per package in British Honduras plus 25 per cent or  $37\frac{1}{2}$  per cent of duty.

### Duty Free Goods

The tariffs of the British West Indian colonies have duty-free lists, usually including goods for colonial Governments, military or naval purposes, municipalities, churches, educational institutions, hospitals, or certain organizations of a public nature. These provisions for exempting goods from duty are not the same in all the colonies, but the general effect is about as indicated. Although these duty-free lists are mentioned, it should be borne in mind that the rates of duty quoted, British Preferential and General, apply in the case of merchandise imported in the usual way for commercial purposes. Some articles, of course, are duty-free no matter for what purpose they are imported.

### Governments Aid Transportation

To insure effectiveness of the reciprocal tariff preferences it is part of the agreement that Canada, with the aid of subsidies from the Colonies, run steamers to and from the various Islands. To this enterprise Bermuda, Leeward Islands, Windward Islands, Barbados, Trinidad, and British Guiana (Eastern Group) contribute annually £27,500 to maintain fortnightly mail, passenger and freight service, alternating with fortnightly sailings of freight vessels. Bermuda, Jamaica, and the Bahamas (Western Group) contribute £18,000 per annum to the operation of fortnightly mail, passenger and refrigerated freight ships, alternating with a fortnightly refrigerated freight service with Jamaica direct. A connecting steamer runs between Jamaica and British Honduras every two weeks.

### Imperial Conference Agreement Preferences

The Canada-United Kingdom Trade Agreement, 1932, made provision for minimum amounts of preference in British West Indian Colonies on certain articles, as follows:—

	Colony	Margin of Preference
Rubber-soled boots and shoes of rubber or canvas.....	All the Colonies.....	1s. per pair.
Motor vehicles, parts and tires.....	All except Trinidad...	20% ad valorem.
Silk hosiery.....	All the Colonies.....	9d. per pair.
Cotton and rayon hosiery.....	All the Colonies.....	6d. per pair.
Butter.....	All the Colonies.....	1½d. per pound.
Electrical appliances and apparatus.....	Barbados, Bermuda, and Trinidad.....	15% ad valorem.
Bacon and ham.....	Barbados, Bermuda, and Trinidad.....	½d. per pound.
Lumber.....	Barbados, British Guiana, Antigua, and Trinidad.....	Preference against pitch pine of 10s. per 1,000 ft.
Condensed milk.....	Barbados, Jamaica, and Trinidad.....	10% ad valorem.
Shooks.....	Barbados, Jamaica, and Trinidad.....	10% ad valorem.

	Colony	Margin of Preference
Potatoes and onions . . . . .	Barbados, and British Leeward Islands . . . . .	2s. per 100 pounds. 9d. per 100 pounds.
Oats . . . . .	Barbados . . . . .	
Hardware . . . . .	Bermuda, Jamaica, Leeward and Wind- ward Islands . . . . .	10% ad valorem. 2d. per dozen.
Eggs . . . . .	Bermuda . . . . .	10% ad valorem.
Canned meat . . . . .	Bermuda . . . . .	15% ad valorem.
Canned fruit and vegetables . . . . .	Bermuda . . . . .	10% ad valorem.
Furniture . . . . .	Bermuda . . . . .	10% ad valorem.
Apparel (except hosiery) . . . . .	Jamaica . . . . .	10% ad valorem.
Wood and timber . . . . .	Jamaica . . . . .	10% ad valorem.
Goods in general . . . . .	Bahamas . . . . .	50% of duty.

#### Turks and Caicos

Turks and Caicos Islands (dependency of Jamaica) passed an Ordinance on March 22, 1932, extending a preference (except in the case of a limited number of duty-free goods) to "goods the growth, produce or manufacture of the United Kingdom, the Dominion of Canada or Jamaica, or of any part of the British Empire." The rate is 10 per cent Preferential and 15 per cent General on unspecified goods which include a broad class of manufactured wares. Specific duties are in force for a restricted list of commodities, mainly grain, flour, meats, spirits, wines, cheese, lard, soap, and cement, with varying amounts of preference. These Islands were not included in any of the Canada-West Indies trade agreements but have been accorded the Canadian British Preferential tariff since 1907.

#### Cayman Islands

Most imports into Cayman Islands (dependency of Jamaica) are dutiable at 12½ per cent ad valorem. In pursuance of proposals at the Imperial Economic Conference the question of Imperial preference is under consideration.

Canadian Order in Council of July 27, 1933, extended the British Preferential Tariff of Canada to the Cayman Islands.

#### Empire Content and Dutiable Value

Goods qualify for preferential tariff treatment in the British West Indies, Bermuda, British Guiana, and British Honduras when grown, produced or manufactured, within the area entitled to preference and consigned therefrom to the Colonies. The colonies of Trinidad, Antigua, Dominica, St. Kitts-Nevis, Montserrat, and St. Vincent, followed the example of the United Kingdom which, as from April 1, 1933, increased the Empire content requirement for tariff preference purposes from 25 per cent to 50 per cent on 46 items, some of them very comprehensive. Action was taken in British Guiana and in the Bahama Islands to increase from 25 per cent to 50 per cent the Empire content requirement on goods without limitation. In Barbados, Antigua, Dominica, St. Kitts-Nevis and Montserrat a 75 per cent content is required for optical glass, optical instruments, and their component parts. In the Windward Islands (Grenada, St. Lucia, and St. Vincent), motor cars and motor cycles are accorded a specially reduced British Preferential tariff when made wholly from British material by British labour. Otherwise the minimum content of labour and/or material required is 25 per cent of the factory or works cost in the finished article. The final process of manufacture must be performed in the country entitled to preference.

Article VII of the Trade Agreement empowers the Government of any of the Colonies, on giving six months' notice, to confine concessions granted in the agreement to products of Canada conveyed without transshipment by ship direct from a Canadian port or by way of one of the other Colonies entitled to the advantages of the agreement. In Jamaica, since September 30, 1930, the preferential tariff on Canadian goods applies only to goods entering the Colony by direct shipment from Canadian ports. British Honduras has given notice that direct shipment of Canadian goods will be required after October 31, 1933.

Valuation of goods for customs duty purposes in British West Indies, Bermuda, British Guiana, and British Honduras is the selling price to the West Indian importer, except that British Guiana, Trinidad, and St. Lucia adds transportation costs to destination, and St. Vincent adds the inland freight to seaboard.

### Sierra Leone

A Customs Tariff Ordinance, effective from April 30, 1932, introduced Empire tariff preference for the first time in Sierra Leone (West Africa)—one of the colonies to which Canada extended her British Preferential tariff by Order in Council of January 25, 1913.

Sierra Leone created a margin of preference for Empire goods by increasing the rate on non-Empire goods usually to the extent of 10 per cent ad valorem and maintaining the former rates as an Empire preferential tariff. Following are some typical rates in force, the preferential rate in each case being applicable to Canadian products:—

	British Preferential Tariff	General Tariff
Motor cars and lorries..... ad val.	Free	20%
Cement..... per 400 lbs. gross	1s. 1d.	2s. 0d.
Calcium carbide..... per lb.	$\frac{1}{2}$ d.	$\frac{1}{2}$ d.
Fish, dried, salted, smoked or pickled (not in tins, jars or bottles)..... per 100 lbs.	3s. 0d.	3s. 6d.
Flour, wheaten..... per 112 lbs.	1s.	2s.
Agricultural implements..... ad val.	Free	10%
Lard and lard substitutes..... per 100 lbs.	8s. 4d.	12s. 6d.
Machinery..... ad val.	Free	10%
Beef and pork, pickled or salted, not canned or bottled..... per 100 lbs.	3s. 4d.	4s. 2d.
Meat, smoked or cured..... per 100 lbs.	14s. 7d.	18s. 9d.
Paints and colours..... per 100 lbs.	5s. 0d.	6s. 3d.
Onions and potatoes..... per lb.	$\frac{1}{2}$ d.	$\frac{1}{2}$ d.
Toilet soap..... per 100 lbs.	12s. 6d.	16s. 8d.
Other soap..... per 112 lbs.	7s. 6d.	10s. 0d.
Unmanufactured lumber..... per 1,000 super ft.	20s.	25s.
All edibles, groceries, provisions, ordinarily used as human food, otherwise unspecified in the complete tariff..... ad val.	10%	20%
Goods, wares and merchandise not specified in any item of the tariff..... ad val.	20%	30%
Aircraft, perishable provisions, living animals, coal, coke, patent fuel, coopers' stores, water filters, fire engines, fishing net and gear, fresh fish and fruit, ice chests, fresh or preserved milk, packages for transport of West African produce, water tanks and some other articles.....	Free	Free

### Empire Content

The preferential rates apply to goods, the growth, produce or manufacture of the British Empire provided the goods are consigned therefrom, and in the case of manufactured goods that at least 25 per cent of their total value is the result of material produced and/or labour performed within the British Empire, with some special provisions in the case of oils, tobacco and sugar.

### Value for Duty

The value for duty in Sierra Leone of goods subject to an ad valorem rate is the price paid or to be paid by the owner thereof, after the deduction of any

allowance made by the seller to the owner by way of recognized trade or cash discounts and of any charges incidental to the delivery of the goods in Sierra Leone but no deduction of contingent discounts or rebates, or buying and selling commissions and sample discounts shall be allowed.

### Gambia

The colony of Gambia (West Africa) which has received the benefit of the British preferential tariff of Canada since 1913, adopted Empire preferential rates for the first time in a customs tariff ordinance effective as from June 13, 1932. The prevailing rates of the tariff are 10 per cent ad valorem British preferential and 12½ per cent ad valorem general tariff. These rates apply to apparel, bags, trunks and valises, blue, blacking and polishes, brooms and brushes, clocks and watches, confectionery, electrical apparatus, haberdash- and millinery, medicines and drugs, and many other articles as well as the goods unspecified in the complete tariff. Some of the other rates are:—

		British Preferential Tariff	General Tariff
	per 100 lbs.	8s.	10s.
Motor vehicles.....	per 100 lbs.	12s.	15s.
Shoes, shoes and slippers made principally of rubber and canvas.....	ad val.	5%	25%
Other kinds of boots, shoes and slippers.....	per pair	4d.	6d.
Clothes.....	ad val.	10%	12½%
Cement.....	per 100 lbs.	16s.	20s.
Calcium carbide.....	per 400 lbs. gross	1s.	1s. 3d.
Fish, canned.....	per 100 lbs.	8s.	10s.
Fish, dried, salted, smoked, pickled.....	per 100 lbs.	8s.	10s.
Fruit, canned.....	per 100 lbs.	8s.	10s.
Wheat flour.....	per 98 lbs.	1s.	1s. 3d.
Macaroni, vermicelli.....	per 100 lbs.	1s.	1s. 3d.
Lard and lard substitutes.....	per 100 lbs.	8s.	10s.
Penwriters and calculating machines.....	each	25s.	30s.
Meats, smoked or cured.....	per 100 lbs.	16s.	20s.
Meats, canned.....	per 100 lbs.	16s.	20s.
Toilet soap.....	per 100 lbs.	5s.	6s. 3d.
Sugar soap.....	per 100 lbs.	4s.	5s.
Sugar refined.....	per 100 lbs.	4s.	5s.
Onions and potatoes.....	per 100 lbs.	2s.	2s. 6d.
Vegetables, canned.....	per 100 lbs.	8s.	10s.
Living animals, coal, coke, water filters, agricultural implements and machinery, water tanks, and some other articles.....		Free	Free

### Empire Content

The preferential rates in Gambia apply to goods, the growth, produce or manufacture of the British Empire, provided the goods are consigned therefrom, and in the case of manufactured goods that at least 50 per cent of their total value is the result of material produced and or labour performed within the British Empire, with some special provisions in the case of oils, tobacco and sugar.

### Value for Duty

The value for duty in Gambia of goods subject to an ad valorem rate is the price paid or to be paid by the owner thereof, after the deduction of any allowance made by the seller to the owner by way of recognized trade or cash discounts and of any charges incidental to the delivery of the goods in Gambia but no deduction of contingent discounts or rebates, or buying and selling commissions and sample discounts shall be allowed.



## Mauritius

The British preferential schedule of the Canadian tariff was extended, by Order in Council, in effect from February 1, 1913, to Mauritius and dependencies.

Mauritius, on September, 30 1924, adopted a Customs Preferential Tariff Ordinance which gave reduced duties specifically to the United Kingdom and empowered the Governor to extend the same preferences to any British possessions which might grant reciprocity. These preferences were granted to Canada by a proclamation of April 2, 1925. A tariff resolution of November 15, 1927, confirmed March 31, 1928, revised the preferences accorded to the United Kingdom and withdrew some from Canada. The position changed again under a Customs Ordinance of December 2, 1929. This Ordinance specifies the United Kingdom and Canada as being entitled to all the preferences established and empowers the Governor to extend them to any other British possession on a reciprocal basis. An ordinance of October 27, 1932, greatly expanded the list of goods subject to preference. It was announced in August, 1933, that the benefit of the British preferential tariff was extended to the whole Empire. The preference list, in condensed form, is:—

		British Preferential Tariff	General Tariff
Bacon and hams, not tinned.....	per 100 kg.	10 Rs.*	20 Rs.*
Bacon and hams, tinned.....	ad val.	11%	22%
Biscuits and cakes.....	ad val.	13-2%	27½%
Brushes and brooms.....	ad val.	13-2%	22%
Canvas, untreated.....	per 100 kg.	4-40 Rs.	8-80 Rs.
Cartridges, empty.....	per 100	0-55 Rs.	1-10 Rs.
Cartridges, loaded.....	per 100	1-10 Rs.	2-20 Rs.
Cement.....	per 100 kg.	0-22 Rs.	0-82 Rs.
Cheese.....	per 100 kg.	8 Rs.	22 Rs.
Cinematograph films.....	per metre, 3-5 cm. wide	Free	0-04 Rs.
Clocks, watches and parts.....	ad val.	11%	16½%
Cocoa and chocolate, unsweetened.....	per kg.	0-11 Rs.	0-22 Rs.
Cocoa and chocolate, sweetened, for potable use.....	per kg.	0-11 Rs.	0-22 Rs.
Confectionery.....	ad val.	13-2%	27½%
Cotton piece goods.....	per kg.	0-12 Rs.	0-24 Rs.
		to 0-51 Rs.	to 1-02 Rs.
	or, if higher, ad val.	13%	26%
Cotton manufactures, other than piece goods.....	ad val.	13%	26%
Cutlery.....	ad val.	5½%	27½%
Cycles and parts.....	ad val.	5½%	16½%
Disinfectants and insecticides, imported for use as such.....	ad val.	Free	13-2%
Earthenware, chinaware and other clay products; aluminium ware.....	ad val.	11%	27½%
Electrical goods and fittings.....	ad val.	13-2%	22%
Enamelled ware.....	ad val.	5½%	22%
Fish, canned, other than salmon (weight of tins included).....	per 100 kg.	5½ Rs.	11 Rs.
Fungicides.....	ad val.	Free	13-2%
Glassware, except sheet glass.....	ad val.	11%	22%
Haberdashery and millinery (excluding silk).....	ad val.	13%	26%
Hardware (excluding cutlery and enamelled ware).....	ad val.	11%	22%
Honey, jams, marmalades, preserves, jellies and canned fruits.....	per kg.	0-22 Rs.	0-44 Rs.
Indigo, Prussian blue and ultramarine blue.....	per kg.	1-10 Rs.	2-75 Rs.
Iron and steel bars, rods, angles, hoops, nails, screws, bolts, nuts, rigging, plates, sheets, tubes and pipes including flanges, sockets, tees, elbows and bends, wire (including barbed wire and wire rope), rivets and washers, not specially shaped or prepared for constructional work, galvanized.....	per 100 kg.	1-65 Rs.	2-20 Rs.
Foregoing, not galvanized.....	per 100 kg.	1-10 Rs.	1-65 Rs.
Iron and steel goods, unspecified in the complete tariff.....	ad val.	11%	22%
Jewellery (including imitation).....	ad val.	16½%	27½%
Lard, beef-fat, marrow and dripping.....	per 100 kg.	5 Rs.	10 Rs.
Leather manufactures (except boots and shoes).....	ad val.	11%	22%
Machinery for certain industries.....	per 1,000 kg.	1-45 Rs.	5½%
Motor vehicles of all kinds, motor tractors (other than agricultural), motor chassis, spare parts and accessories.....	ad val.	5½%	36-6%
Musical instruments and parts.....	ad val.	5½%	22%
Oils, animal and vegetable, unspecified.....	per 100 kg.	5½ Rs.	7-7 Rs.
Paint, including ochre.....	ad val.	13-2%	22%
Paper, newsprint.....	ad val.	5½%	13-2%
Paper (except newsprint, cigarette, muslin and tissue).....	ad val.	13-2%	22%
Paper goods, unspecified.....	ad val.	13-2%	22%
Perfumery and toilet preparations (excluding toilet soap).....	ad val.	22%	33%
Preserved provisions, unspecified.....	ad val.	13-2%	22%
Rails and tramway materials.....	ad val.	5½%	13-2%

\*Rupee equals 1s. 6d.; 100 kilogs., 220-4 lbs.

	British Preferential Tariff	General Tariff
Rubber tires and tubes of all kinds.....	ad val.	36·6%
Saccharine and like substances.....	per kg.	80 Rs.
Salmon, canned (weight of tins included).....	per 100 kg.	22 Rs.
Salt, common.....	per 100 kg.	6·05 Rs.
Shoes and boots of rubber, or with soles or uppers of rubber.....	ad val.	22%
Shoes and boots, other kinds.....	ad val.	16½%
Silk and artificial silk manufactures, and articles containing 15 per cent by weight or more of silk or artificial silk.....	ad val.	55%
Soap, other than common.....	ad val.	22%
Sulphate of ammonia.....	per 100 kg.	1·10 Rs.
Toys, games, athletic requisites.....	ad val.	22%
Tramway locomotives, carriages, wagons and parts.....	ad val.	16½%
Twine of all sorts.....	per 100 kg.	11 Rs.
Varnish, liquid, of all kinds.....	per hectolitre (22 gals.)	9·9 Rs.
Vinegar.....	per hectolitre (22 gals.)	3·30 Rs.
	For each degree exceeding 8	0·33 Rs.
Wearing apparel, other than silk and artificial silk.....	ad val.	26%
Woollen goods.....	ad val.	26 %

### Empire Content and Dutiable Value

Preference is granted in Mauritius on condition that goods be consigned direct from the preference country, contain at least 25 per cent of the labour and/or material of such country, and that in the case of manufactured goods the final process be performed in the preference country.

Ad valorem duties are levied on the domestic value (i.e., price at which, at time of exportation, similar goods are offered for sale, to all purchasers, in usual wholesale quantities in the ordinary course of trade in the principal markets of the exporting country, including cost of ordinary packages but not excise), plus extra cost of packing and packages for export, cartage to port of shipment, and all other expenses incidental to placing the goods on board the ship, but in no case shall the value for duty be less than the cost of the goods to the importer at the port of exportation.

### British Somaliland

British Somaliland, since February 18, 1932, grants tariff preference to most British Empire goods. These preferences are:—

	British Preferential Tariff	General Tariff
Fresh, dried or preserved fruits; nuts; vegetables; cured meat and fish; confectionery; condiments and spices; cocoa; coffee; vinegar; oils and flavouring essences; articles of food and drink in tins or bottles (except tea, aerated waters, liquors, refined sugar, certain kinds of rice and dates).....	ad val.	20%
Distilled alcoholic liquors, at 50 degrees of Gay-Lussac alcoholometer at 15 degrees centigrade.....	per gal.	13·2 Rs.*
Wines, beers and other fermented alcoholic liquors.....	ad val.	25%
Refined sugar.....	per 28 lbs.	½ Rs.
Rice (Dawood Khani, Bhimri, and Shalulleh).....	ad val.	20%
Dates, dry, loose and dates, wet, in boxes.....	per bag (168 lbs.)	2½ Rs.
Articles of European attire.....	ad val.	20%
Grey sheeting.....	per bale of 750 yds.	77 Rs.
European white long cloth.....	per piece of 40 yds.	5½ Rs.
Matts and matting, and native pottery.....	ad val.	20%
Building material.....	ad val.	20%
Naphthalene.....	ad val.	20%
Matches, standard box of 60 matches.....	per box	20%
Matches, in larger boxes.....	ad val.	20%
Unmanufactured tobacco, British Empire grown.....	ad val.	25%
Unmanufactured tobacco grown in foreign countries.....	ad val.	—
Tobacco, cigars and cigarettes, manufactured in the British Empire from Empire grown tobacco.....	ad val.	10%
Tobacco, cigars and cigarettes, manufactured in the British Empire from a blend of Empire and foreign tobacco.....	ad val.	12½%
Tobacco, cigars and cigarettes, manufactured in the British Empire from foreign tobacco.....	ad val.	15%
Tobacco, cigars and cigarettes, manufactured in foreign countries.....	ad val.	25%
All goods other than the foregoing (except those admitted duty-free).....	ad val.	25%

\*A rupee equals 1s. 6d.

Canada has extended her British Preferential tariff to British Somaliland since February 1, 1913.

### **Empire Content and Dutiable Value**

British Somaliland accords a tariff preference when goods are produced or manufactured in and consigned from a British Empire country. Manufactured goods require to be manufactured from materials of British or Empire origin to the extent of 50 per cent of their full content.

Ad valorem duties are levied, in the case of certain goods, on values approved yearly on April first by the Governor; otherwise, on the wholesale cash price less trade discount, for which goods of the like kind and quality are sold or are capable of being sold, at the time and place of importation, without any abatement or deduction except the amount of the duties payable on the importation thereof.

### **Seychelles**

Seychelles, on July 23, 1932, introduced a preferential tariff for British Empire goods. The rate on mos. Empire goods is 15 per cent ad valorem, and on foreign goods, 25 per cent ad valorem. These rates apply to:—Boots and shoes; leather manufactures; cotton goods; confectionery; cutlery; furniture; hardware; clocks and watches; musical instruments; aluminium ware; enamelled ware; metals and manufactures thereof; painters' colours and materials; sewing machines; toys and games; wireless sets and parts; and unspecified goods. Motor vehicles, parts, accessories, and rubber tires of British Empire origin are 15 per cent ad valorem compared with 30 per cent ad valorem when of foreign origin. Corresponding rates on silk manufactures are 15 per cent and 50 per cent ad valorem. All dutiable goods are subject to a surtax of 10 per cent of duty and (except rice and flour) a package tax ranging from one-quarter of a rupee on any packet valued less than 100 rupees to 20 rupees when the value of the packet exceeds 1,000 rupees. A rupee equals  $1\frac{1}{2}$  shillings.

Seychelles, since February 1, 1913, has been under the British Preferential tariff of Canada.

### **Empire Content and Dutiable Value**

Seychelles accords tariff preference to goods wholly or partially produced or manufactured in a British Empire country, provided that the final process be performed therein and expenditure in material and labour be not less than one-fourth of the factory or works cost of the article in its finished state.

Ad valorem duty is levied on domestic value in the country of origin at time of exportation, plus extra cost of carriage to port of shipment. Domestic value is defined as the price for which the manufacturer or producer is prepared to supply similar goods in similar quantities to any purchaser in the country of origin, including cost of ordinary packing. Cost of outside packages, labour and material used in packing for export, charges at port of shipment, drawback of duty, and recognized trade or cash discount may be deducted, if shown as included in domestic value, but not contingent discount, or buying or selling commission.

### **Ceylon**

A Resolution, establishing Empire preference in the colony of Ceylon on about 100 tariff items, was passed by the State Council on January 19, 1933, and brought into force on January 31. The preference is extended to all British countries. It was created in most instances by an addition of 10 per cent ad valorem to former duties. Principal articles on which preference is granted are:—



	British Preferential Tariff	General Tariff
Motor cars and motor cycles.....	ad val. 20%	27½%
Motor lorries, vans, omnibuses, tractors, trailers and tram cars.....	ad val. 15%	22½%
Splash-proof accumulators, enclosed, for motor vehicles.....	ad val. 20%	27½%
Other electric accumulators (except dry cells).....	ad val. 10%	20%
Electric batteries, dynamos, generators, motors and transformers.....	ad val. 10%	20%
Unspecified electrical goods and apparatus.....	ad val. 15%	25%
Wireless goods and apparatus.....	ad val. 15%	25%
Unspecified machinery and parts; machinery belting; unspecified manufactures of iron and steel; machine tools.....	ad val. 15%	25%
Cutlery, knives, scissors, razors and other cutlery ware.....	ad val. 15%	25%
Ploughs, harrows, picks, digging forks, axes, saws, pruning knives, tapping knives, mamolies and ketties.....	ad val. 10%	20%
Implement, tools and parts (except agricultural).....	ad val. 15%	25%
Iron and steel safes.....	ad val. 15%	25%
Sewing machines.....	ad val. 15%	25%
Musical instruments.....	ad val. 20%	30%
Typewriters and parts.....	ad val. 10%	20%
Clocks and watches and parts.....	ad val. 20%	30%
Furniture.....	ad val. 15%	25%
Aluminium ware, chinaware and porcelainware.....	ad val. 15%	25%
Cotton yarn.....	ad val. 5%	15%
Lace and net.....	ad val. 15%	25%
Mixed material, blankets, carpets, handkerchiefs, scarves, shawls, piece goods and others.....	ad val. 15%	25%
Silk and artificial silk yarn.....	ad val. 10%	20%
Silk and artificial silk (including any admixture thereof) and manufactures thereof, namely, unspecified articles made wholly thereof and unspecified articles of which the value of the silk or artificial silk exceeds 20% of the value of the components of the article.....	ad val. 20%	25%
Unspecified woollen and worsted manufactures.....	ad val. 15%	25%
Hosiery (other than silk and artificial silk).....	ad val. 15%	25%
Haberdashery and millinery (excluding silk and artificial silk).....	ad val. 15%	25%
Boots and shoes (except canvas, rubber soled).....	ad val. 15%	25%
Leather and leather goods.....	ad val. 15%	25%
Biscuits and cakes.....	ad val. 15%	25%
Butter, tinned or frozen.....	ad val. 15%	25%
Cereal foods prepared.....	ad val. 15%	25%
Cheese.....	ad val. 10%	20%
Confectionery.....	ad val. 15%	25%
Cream.....	ad val. 15%	25%
Meat, fish, poultry or game, frozen or refrigerated.....	ad val. 15%	25%
Meat, tinned, potted or preserved.....	ad val. 15%	25%
Fish, tinned, potted or preserved.....	ad val. 10%	20%
Fish, dried or salted.....	per 112 lbs. 1 R.	2 R.*
Fresh apples and grapes.....	ad val. 10%	20%
Unspecified fresh or dried fruit.....	ad val. 15%	25%
Fruit, tinned, bottled or preserved.....	ad val. 15%	25%
Jams, jellies and preserves.....	ad val. 15%	25%
Vegetables, fresh or dried.....	ad val. 15%	25%
Vegetables, preserved or tinned.....	ad val. 15%	25%
Soap, toilet, perfumed or medicated.....	ad val. 15%	25%
Other soap.....	ad val. 10%	20%
Toys and games (including athletic materials).....	ad val. 15%	25%
Timber, prepared and unprepared.....	ad val. 15%	25%

\*A rupee equals 1s. 6d.

Ceylon, since July 14, 1898, has been receiving the Canadian British Preferential tariff.

#### Empire Content and Dutiable Value

Ceylon tariff preference is confined to certain goods consigned from and grown, produced or manufactured in the British Empire. In the case of manufactured goods, at least 25 per cent of their value must be the result of labour within the British Empire. Under the heading of labour may be included any material of purely Empire origin entering into the composition of the article (including interior packing), the cost of manufacture including wages, factory overhead charges, and cost of labour of packing for retail sale.

Ad valorem duties are levied on the "true wholesale market value" defined as the wholesale cash price, less trade discount, for which goods of the like kind and quality are sold, or are capable of being sold, at the time and place of import-



ation, without any abatement or deduction whatever except of the amount of duties payable on the importation thereof; or where such price is not ascertainable, the cost at which goods of the like kind and quality could be delivered at such place without any abatement or deduction except of the amount of duties payable thereon.

### Federated Malay States

The Federated Malay States (Perak, Selangor, the Negri Sembilan and Pahang), adopted Empire tariff preference for the first time on March 12, 1932, on some half-dozen items, and on June 1, 1932, extended preferences to another half-dozen items. These items, with duties now in force, are:—

	British Preferential Tariff	General Tariff
Brandy.....per proof gal.	S\$8-10½*	S\$10½-14*
Wines.....per gal.	S\$0-90-5-00	S\$1½-6-00
Ale, beer, cider, etc.....per gal.	S\$1-20	S\$1-30
Cigarettes and manufactured tobacco (except cigars and snuff) imported in air-tight tins or containers.....per lb.	S\$1-00	S\$1-10
Cartridges.....per 1,000	S\$10-00	S\$11-00
Cement.....per ton	S\$6-00	S\$12-00
Cosmetics and perfumery.....ad val.	25%	50%
Cycles and parts (except tires and tubes).....ad val.	10%	20%
Flooring and wall tiles.....per ton	S\$10-00	S\$12-00
Margarine.....per lb.	S\$0-05	S\$0-10
Musical instruments (other than pianos), wireless receiving sets and parts including gramophones, electric gramophones or reproducers, phonographs, records, needles, valves and other parts or accessories.....ad val.	10%	20%

Following are additional preferences brought into force on October 14, 1932, mainly for the purpose of implementing Article 8 of the Canada-United Kingdom Trade Agreement of 1932:—

Boots, bootees, shoes, overshoes, slippers and sandals of all descriptions made wholly or partly of rubber, balata or gutta-percha (except where outer part of upper, apart from stitching, fastening or ornaments, is made entirely of leather or leather and elastic).....per pair	S\$0-10	S\$0-50
Wearing apparel not otherwise provided for, including boots, bootees, shoes, over- shoes, slippers and sandals of all descriptions and materials, finished or unfin- ished, other than those articles provided for in the foregoing item.....ad val.	10%	20%
Rubber soles.....per pair	S\$0-05	S\$0-25
Cotton, linen, jute, silk or artificial silk, felt, flannel, woollen and all other textile goods made from plant fibres.....ad val.	10%	20%
Umbrellas and lamp shades covered with silk, artificial silk or cotton.....ad val.	5%	10%
Motor and motor cycle tires and tubes.....ad val.	Free	20%
Cycle tires.....per cover	S\$0-08	S\$0-15
Cycle inner tubes.....per tube	S\$0-03	S\$0-06
Milk (including cream), condensed, desiccated and preserved.....per 100 lbs.	S\$1-00	S\$5-00
Fruits, jams, marmalade, vegetables, fish, meats and soups in metal, glass or earthen- ware containers.....ad val.	5%	20%
Butter, tinned.....per lb.	S\$0-12	S\$0-17
Butter, frozen.....per lb.	S\$0-15	S\$0-20
Printing paper.....ad val.	Free	10%
Batteries for electric torches or hand lamps.....ad val.	5%	20%
Other electric batteries.....ad val.	Free	15%
Manufactured brass, bronze, and copperware.....ad val.	5%	15%
Tanned hides and skins, leather and imitation leather manufactures other than fancy goods.....ad val.	5%	15%
Paraffin wax and articles made thereof.....ad val.	S\$0-03	S\$0-05
Sugar, molasses, sugar candy and sugar cane.....per lb.	S\$0-06	S\$0-08
Tea.....per lb.	Free	20%†
Motor vehicles.....ad val.		

\*A Straits dollar equals 2s. 4d.

†Registration fee.

The Federated Malay States were granted the British Preferential tariff of Canada by Order in Council passed on January 25, 1913, with effect from February 1, 1913.

#### **Empire Content and Dutiable Value**

Tariff preferences are granted in the Federated Malay States on articles grown, produced or manufactured in, and consigned from a British Empire country. Manufactured articles are not entitled to preference unless 25 per cent of their value is the result of labour within a country entitled to preference.

The value of an article, for the purpose of assessing ad valorem duty, is the wholesale cash price, less trade discount, for which goods of the like kind and quality are sold, or are capable of being sold, at the time and place of exportation, without any abatement or deduction except the amount of duty payable thereon; or where such price is not ascertainable, the cost at which goods of the like kind and quality could be delivered at such place without any abatement or deduction other than the amount of duty payable thereon.

#### **Unfederated Malay States**

The Unfederated Malay States introduced Empire tariff preferences during the year 1932 as follows:—Johore, April 21; Kelantan, May 17; Kedah and Perlis, May 31; Trengganu, July 13. Following the example of the Federated States, preferences were first granted to tobacco, cosmetics, perfumes, cement, cartridges, brandy, wines, ale, beer, cider, etc., and as a result of the Imperial Economic Conference at Ottawa, from October, 1932, new concessions were accorded to motor vehicles, rubber footwear, rubber tires and tubes, condensed milk, canned fruits, canned meats, canned fish, canned vegetables, electric batteries, wearing apparel, textiles, and some other articles. The rates of duty and preferences are now practically the same in the Federated and Unfederated Malay States.

All the Unfederated Malay States require a minimum British Empire content of at least 25 per cent, except Perlis, which increased its minimum requirement to 50 per cent on May 1, 1933.

A Canadian Order in Council of June 28, 1933, extended the British Preferential Tariff of Canada to the Unfederated Malay States.

#### **Straits Settlements**

Preferences established on May 30, 1932, by the Straits Settlements on certain beverages and tobaccos were increased on November 14, 1932, to 2.50 Straits dollars per gallon on brandy; 1 Straits dollar per gallon on sparkling wines; 60 Straits cents per gallon on still wines; 10 Straits cents per gallon on ale, beer, stout, porter, cider and perry; 10 Straits cents per pound on cigarettes, and manufactured tobacco in air-tight tins and containers. The Straits dollar referred to above is equivalent in value to 2s. 4d.

In order to be entitled to preference, these goods must be produced or manufactured in a British Empire country, and consigned therefrom, and at least 25 per cent of their value must be the result of labour within the British Empire.

Motor cars and traction engines of non-Empire origin, since October 14, 1932, are subject to a registration fee of 20 per cent ad valorem, payable on the c.i.f. value at the time of first registration. Those of British Empire origin

are exempt from this tax. In order to be regarded as being of British Empire origin motor cars and traction engines must have at least a 50 per cent Empire content.

On July 14, 1898, the British Preferential tariff of Canada was extended to Straits Settlements.

### British Borneo

The three British customs areas in the Island of Borneo, viz., Brunei, British North Borneo, and Sarawak, have been accorded British preference by Canada since February 1, 1913.

Brunei, in 1926, adopted for the United Kingdom and Canada a tariff preference of  $2\frac{1}{2}$  per cent ad valorem on motor vehicles and on January 1, 1930, extended this preference to motor car tires, tubes and accessories, but on July 1, 1932, these preferences were increased, and new preferences granted on other articles. Present preferences with specific rates expressed in the Straits dollar, worth 2s. 4d., are:—

	British Preferential Tariff	General Tariff
Motor vehicles, tires, tubes and accessories..... ad val.	Free	20%
Cosmetics and perfumes..... ad val.	10%	20%
Cement..... per ton	\$S2·00	\$S5·00
Cartridges..... per 100	\$S10·00	\$S11·00
Brandy..... per gal.	\$S7·20	\$S9·50
Sparkling wines..... per gal.	\$S4·50	\$S5·50
Still wines, over 26% proof..... per gal.	\$S3·00	\$S4·00
Still wines, under 26% proof..... per gal.	\$S1·00	\$S2·00
Ale, beer, stout, porter, cider, perry..... per gal.	\$S0·90	\$S1·00
Cigarettes..... per lb.	\$S0·80	\$S·090
Sugar (since February 22, 1933)..... per 100 lbs.	\$S0·62½	\$S0·75

British North Borneo has been granting to the United Kingdom since 1927 and to Canada since 1928, a preferential rate of three-fourths of the full rate on the following:—Vehicles, including motor vehicles; machinery and machines; metals, manufactured or unmanufactured; cutlery; glassware; earthenware, crockery and porcelain; cloth, clothing, haberdashery; perfumery; chemicals and dyes; timepieces; and vessels. The general tariff rate on all these commodities (except glassware, 5 per cent) is 10 per cent ad valorem.

Sarawak, on April 1, 1929, extended to Canada preferences already accorded (remission of the whole duty) to United Kingdom on motor vehicles and accessories, tires, engines, boilers and machinery. An Ordinance of December 2, 1932, increased these preferences and established new preferences on electrical and wireless apparatus, metals and cement. Condensed milk was accorded a tariff preference on January 3, 1933, and timber and furniture on February 1, 1933. Existing preferences are:—

	British Preferential Tariff	General Tariff
Motor vehicles, tractors, trailers, tires, tubes, parts and accessories..... ad val.	10%	30%
Machinery, including boilers, auxiliaries and accessories..... ad val.	10%	30%
Electrical and wireless apparatus..... ad val.	10%	30%
Cement and manufactures thereof..... per ton	\$S5·00	\$S10·00
Milk, including cream, condensed, desiccated or preserved..... per lb.	\$S0·01	\$S0·05
Timber, including manufactures thereof and furniture..... ad val.	10%	30%
Metals, manufactured and unmanufactured (not in free list)..... ad val.	10%	30%

### Empire Content and Dutiable Value

To be entitled to British preferential tariff rates, Brunei has prescribed that goods must be grown, produced or manufactured in the British Empire and must contain at least 25 per cent of Empire labour and or material in their factory or works cost. In British North Borneo it is required that such goods show at least 50 per cent Canadian or United Kingdom content in order to qualify for preference. Sarawak issued regulations on May 1, 1933, stating that goods are not deemed to be of British Empire manufacture unless the final process of manufacture takes place within the British Empire and the goods contain at least fifty per cent of British labour and material in the factory or works cost.

In Brunei ad valorem duties are levied on the f.o.b. value at the port of the exporting country; in British North Borneo on the wholesale cash price in the principal markets of the exporting country, less trade discount and excluding the freight, insurance and charges only, but if this price is not ascertainable, the c.i.f. value is taken as the basis for the levying of duty; in Sarawak, on the value of the goods on arrival in the port of importation, including cost, freight and insurance, up to that point.

### Hong Kong

The Colony of Hong Kong, since October 13, 1932, imposes a registration fee on foreign motor vehicles of 20 per cent on the c.i.f. valuation. As the fee does not apply to motor vehicles of British Empire origin it affords a tariff preference. To qualify for this preferential treatment 50 per cent of the value of the motor vehicle must be the result of labour within the British Empire. The registration fee extends to motor cars, motor lorries, motor omnibuses, motor trucks, motor bicycles and motor tricycles.

The Hong Kong duty of 6 Hong Kong dollars per gallon on brandy was reduced as from October 20, 1932, by one-half in the case of brandy produced in the British Empire and consigned from there to Hong Kong.

Under a Hong Kong Ordinance of February 16, 1933, there is a preferential rebate of one-tenth of the duty for unmanufactured tobacco of Empire origin. There is a preferential rebate of one-fifth of the duty on cigars, cigarettes and other manufactured tobacco, of both Empire origin and manufacture or one-tenth if of Empire manufacture only.

The preferential tariff regulations state that tobacco is deemed to be of Empire origin when proved to have been grown in and consigned from the British Empire.

### Cyprus

A Cyprus customs law effective July 14, 1920, established a preferential tariff for Empire goods. Under that measure the General tariff, usually 20 per cent ad valorem, is reduced by one-third on musical instruments and parts, clocks and watches and parts, cinematograph films, beer, ale, porter, and other malt liquors, cotton and woollen goods, leather and leather goods, matches, earthenware and china, furniture, haberdashery and millinery, sporting ammunition, medicines, drugs, chemicals and dyes. On wines, there are preferential rates of 60 per cent or  $66\frac{2}{3}$  per cent of the full rates; on spirits, spirituous compounds, liqueurs and cordials, a preferential rate of 95 per cent of the full rate.

The General preference for goods not specially dealt with is a reduction of one-sixth from the full rate which on most goods is 20 per cent ad valorem, but in consequence of the Imperial Economic Conference proposals margins of preference since October 13, 1932, have been increased from one-sixth to one-



third on those goods (General tariff quoted in brackets):—Common butter (3c. lb.); table butter (6c. lb.); cheese of Kachkaval, touloum and similar type (4c. lb.); cheese of Gruyere, Dutch, Cheddar and some similar types (8c. lb.); tinned fish (15 per cent ad valorem); planks and boards (\$9 per M).

Motor cars, motorcycles, and their parts (before 1923, duty-free) are subject to a General rate of 30 per cent ad valorem, and a British Preferential rate of 10 per cent ad valorem; aircraft and accessories, 20 per cent ad valorem and 5% ad valorem under the General and British Preferential tariffs respectively.

Among the goods which are duty-free regardless of origin are:—Animals, livestock, eggs, fresh fish, printing paper (white or coloured), tools and implements for handicrafts and agriculture, machinery (including agricultural) and parts, chemical manures and fertilizers, timber cut to size for fruit containers.

The British Preferential tariff of Canada was extended to Cyprus in 1930.

#### Empire Content and Dutiable Value

On April 28, 1933, Cyprus adopted regulations governing application of preference, to become effective on August 1, 1933, and which conform with those in operation in the United Kingdom.

The amount on which ad valorem duties are payable is the value at the place of shipment, or purchase of the goods, plus the cost of transport, including insurance, to the Cyprus port of final discharge.

#### Gibraltar

Some preferential rates were introduced in Gibraltar on July 31, 1926, for goods the growth, produce or manufacture of the British Empire. With minor additions made since, the complete tariff is now:—

	British Preferential Tariff	General Tariff
Malt liquors..... per gal.	7d.	10d.
plus, if in bottles, per doz. quarts	1s.	1s.
or, per doz. pints	6d.	6d.
Spirits and strong waters..... per proof gal.	10s.	12s.
Liqueurs and cordials..... per gal.	15s.	18s.
Perfumed spirits..... per gal.	10s.	13s. 4d.
or, if higher, ad val.	7½%	10%
Motor spirit..... per gal.	6d.	6d.
Cigarettes..... per lb.	1s.	1s. 6d.
plus, per 100	5d.	5d.
Other manufactured tobacco..... per lb.	1s. 8d.	2s.
Unmanufactured tobacco..... per lb.	4d.	5d.
Wines in bottles..... per gal.	3s. 4d.	4s.
Wines, otherwise..... per gal.	10d.	1s.

#### Isle of Man

The Customs tariff of the Isle of Man is the same as that in force in the United Kingdom. Canada has accorded her British Preferential tariff to this area since October 3, 1931.

### Channel Islands

The Channel Islands (including Guernsey and Jersey) have tariffs separate from the tariff of the United Kingdom. They have adopted the duties contained in United Kingdom orders passed under the Import Duties Act, 1932 (with Empire preferences), but not the general 10 per cent ad valorem rate. The Channel Islands have been accorded the Canadian British Preferential tariff since October 3, 1931.

### Fiji

Tariff preferences for Empire goods have been in force in Fiji since January 1, 1922. The present list of preferences is mainly that established in an Ordinance of January 1, 1929, which increased the prevailing rates on goods subject to ad valorem duty from 15 per cent Preferential and 27½ per cent General, to 20 per cent Preferential and 35 per cent General. These duties are applicable to articles unspecified in the tariff—a very comprehensive item, including, for example, hardware, spark plugs, paints, wrapping paper, bags, cordage and rope, drapery, stationery, fancy goods, leather and leather goods, boots and shoes of leather, and non-spirituuous drugs and medicines, which are important articles of import into Fiji.

On October 13, 1932, increased preferences were established for rubber footwear, motor vehicles, tires and motor car accessories, and lumber, to comply with a provision in the 1932 Imperial Economic Conference Agreement, between Canada and the United Kingdom.

Some leading imports into Fiji subject to rates other than those quoted, namely, 20 per cent Preferential, and 35 per cent General, are:—

		British Preferential Tariff	General Tariff
Motor vehicles and parts, accessories and tires. . . . .	ad val.	20%	40%
Railway track materials, metal. . . . .	ad val.	15%	30%
Wire, barbed, galvanized, fencing and gates. . . . .	ad val.	Free	15%
Cans, partly made. . . . .	ad val.	Free	15%
Agricultural field machinery and tools. . . . .	ad val.	10%	25%
Most industrial and electrical machinery. . . . .	ad val.	15%	30%
Cement. . . . .	per cwt.	8d.	1s.
Timber, undressed. . . . .	per 100 sup. ft.	2s.	4s.
Timber, dressed. . . . .	per 100 sup. ft.	2s. 6d.	4s. 6d.
Other timber (logs, piles, etc.). . . . .	ad val.	20%	40%
Boxes of wood, or box shooks. . . . .	ad val.	15%	35%
Other bags and sacks. . . . .	ad val.	Free	15%
Boots and shoes of rubber. . . . .	per pair	1s.	2s.
Flour. . . . .	per 2,000 lb.	40s.	60s.
Biscuits, plain or sweet. . . . .	ad val.	20%	40%
Bacon and hams. . . . .	ad val.	20%	40%
Fish. . . . .	ad val.	20%	40%
Cheese. . . . .	ad val.	20%	40%
Fruits and vegetables, fresh. . . . .	ad val.	Free	20%
Jams and jellies. . . . .	ad val.	10%	35%
Confectionery. . . . .	per lb.	3d.	6d.
	plus ad val.	10%	25%

Fiji import duties are supplemented by a port and customs service tax, which has been 2 per cent ad valorem since October 14, 1930.

The Fiji Islands, since 1913, have been under the British Preferential schedule of the Canadian customs system.

### Western Samoa

The former German Samoan Islands, now the Territory of Western Samoa, were assigned in 1920 to Great Britain under mandate of the League of Nations, to be governed by New Zealand. A New Zealand Order in Council of April 20, 1920, established a customs tariff for this area.

Goods which are free of duty regardless of their origin include:—Fresh vegetables and fresh fruit; meat, fish, and poultry, if frozen and not in airtight containers; butter; honey; printed matter; copra and cocoa sacks; manures; insecticides and other articles for destruction of vermin and pests (as approved); shooks of undressed wood; machinery, implements, and materials for the establishment or development of local industries, when approved by the Administrator and duly published.

With the exception only of duty free goods, rough and dressed timber, kerosene, benzine, tobaccos on which there is no preference, imports are taxed 25 per cent ad valorem under the general tariff, and 17½ per cent ad valorem under the British Preferential tariff. The Preferential rate is applicable to Canada and all other parts of the Empire.

A port and customs service tax of 5 per cent ad valorem, effective since January 1, 1932, is chargeable on all goods whether otherwise subject to duty or not.

Regulations respecting content required for preference purposes and valuation of goods for duty purposes are the same as in New Zealand.

### Cook Islands

The tariff and customs laws of New Zealand are made applicable to the Cook Islands (annexed in 1901) by proclamations of the Governor General. Under Article IX of the Canadian-New Zealand Trade Agreement of 1932, British Preferential rates are accorded to Canadian products, while Canada grants to the Cook Islands the same rates as to New Zealand.

### Falkland Islands

The Falkland Islands recently established Preferential duties for wines, tobaccos, and matches of Empire origin, the complete tariff being now as follows:—

	British Preferential Tariff	General Tariff
Spirits.....per proof gal.	£1 0s. 0d.	£1 0s. 0d.
Wine—		
In casks.....per gal.	3s. 0d.	3s. 0d.
In reputed quarts.....per doz.	4s. 6d.	6s. 9d.
In reputed pints.....per doz.	3s. 6d.	3s. 6d.
Malt liquor, mum, spruce, cider and perry—		
In casks.....per gal.	6d.	6d.
In reputed quarts.....per doz.	1s. 0d.	1s. 0d.
In reputed pints.....per doz.	6d.	6d.
Cigars.....per lb.	6s. 1d.	6s. 9d.
Cigarettes, cut and manufactured tobacco and snuff.....per lb.	3s. 7d.	4s. 0d.
Other tobacco.....per lb.	3s. 0d.	3s. 0d.
Matches.....per gross of boxes	Free	4s. 0d.*

\*If a gross of boxes contains more than 10,000 matches, rate is increased in proportion.

## SUMMARY

Tariff preferences are granted to Canada over non-Empire countries on nearly all goods imported into United Kingdom, Australia, New Zealand, Rhodesias, British West Indies, Bermuda, British Guiana, British Honduras, Sierra Leone, Gambia, British Somaliland, Seychelles, Fiji, Cyprus, Western Samoa, Cook Islands, and Isle of Man. To a very large extent preference is also granted in the Irish Free State, Union of South Africa, Mauritius, Ceylon, British Malaya, Channel Islands, and British Borneo, while Gibraltar, Falkland Islands, and Hong Kong give concessions in duty on a few articles.

## EMPIRE PREFERENCE UNDER CANADIAN TARIFF

As this survey is concerned with preferences on goods exported from Canada to other parts of the Empire, brief reference to preferential duties on goods imported into Canada from Empire sources will suffice.

On June 29, 1897, Canada adopted a Reciprocal Tariff, one-eighth lower than her ordinary customs duties. The reduced rates were extended to Great Britain, Ireland, British India, and New South Wales. In the following year, the Reciprocal Tariff was converted into a purely British Preferential Tariff and the margin of preference increased to one-quarter. To the former list of British countries favoured by the new preference, were added British West Indies, Bermuda, British Guiana, Ceylon, and Straits Settlements. The British preference was advanced in 1900 to one-third. It was applied to the same countries as before with the addition of New Zealand, Southern Rhodesia and the territory now comprising the Union of South Africa. In a general tariff revision of 1907, and later amendments, British preferential margins were expanded and diversified. The British preference in 1913 was applied to 24 Crown Colonies; in 1923 to the Irish Free State; in 1928 to Newfoundland; in 1930 to nearly all remaining Crown Colonies; and in 1931 (by trade agreement) to Australia. Canada is, therefore, now granting her British preference to practically the whole Empire.

Additional Canadian concessions to Empire goods, or guarantees of preference, exist under trade agreements concluded with the British West Indies (1925); Australia (1931); New Zealand (1932); United Kingdom (1932); Irish Free State (1932); Union of South Africa (1932); Southern Rhodesia (1932); and Crown Colonies (1932) under the United Kingdom Agreement.



## APPENDIX

## Canadian Tariff Arrangements with Foreign Countries

Arising out of old British treaties applicable to Canada, later British treaties or favoured nation clauses sanctioned by Canadian Acts of Parliament, or through purely Canadian conventions of commerce or trade agreements, Canada extends most-favoured-nation treatment or other tariff concessions on a reciprocal basis to the following foreign countries:—

Country	Treaty or Convention	Terms
Argentine Republic.	Treaty of Amity, Commerce and Navigation with Great Britain of February 2, 1825.	Exchange of most-favoured nation treatment.
Austria.....	Exchange of Notes, followed by Order in Council of July 5, 1933, effective to December 31, 1933.	Canadian Intermediate tariff exchanged for most-favoured-nation treatment in Austria.
Belgium and Luxembourg, Belgian colonies, possessions and mandated territory.	Convention of Commerce with Canada of July 3, 1924.	Exchange of most-favoured nation treatment.
Brazil.....	Exchange of Notes of December 4, 1931	Canadian Intermediate tariff exchanged for most-favoured nation treatment in Brazil.
Colombia.....	Treaty of Friendship, Commerce and Navigation with Great Britain of February 16, 1866.	Exchange of most-favoured-nation treatment.
Czechoslovakia.....	Convention of Commerce with Canada of March 15, 1928	Exchange of most-favoured-nation treatment.
Denmark.....	Treaties of Peace and Commerce with Great Britain of February 13, 1660-1 and July 11, 1670.	Exchange of most-favoured-nation treatment.
Estonia.....	Canadian Trade Agreements Act of June 11, 1928, accepted Article 28 of United Kingdom—Estonia Treaty of Commerce and Navigation of January 18, 1926.	Exchange of most-favoured-nation treatment.
Finland.....	Finland Trade Agreement Act of June 12, 1925, accepted Article 23 of United Kingdom-Finland Treaty of Commerce and Navigation of December 14, 1923.	Exchange of most-favoured-nation treatment.
France and Colonies.....	Trade Agreement with Canada, signed May 12, 1933, in force June 10, 1933.	As regards scheduled goods, percentage reductions from Canadian Intermediate tariff or actual Intermediate exchanged for French Minimum tariff or percentage reductions from General tariff.
Germany.....	Exchange of Notes followed by Order in Council of March 31, 1933, effective for a period of 9 months.	Canadian Intermediate tariff exchanged for most-favoured-nation treatment in Germany.
Hungary.....	Canadian Trade Agreements Act of June 11, 1928, accepted Article 20 of United Kingdom-Hungary Treaty of Commerce and Navigation of July 23, 1926.	Exchange of most-favoured-nation treatment.
Italy, colonies and possessions.	Convention of Commerce with Canada of January 4, 1923	Exchange of most-favoured-nation treatment.
Japan.....	Japanese Treaty Act of April 10, 1913, sanctioned (with provisos) United Kingdom-Japan Treaty of Commerce and Navigation of April 3, 1911.	Exchange of most-favoured-nation treatment.
Latvia.....	Canadian Trade Agreements Act of June 11, 1928, accepted Article 26 of Great Britain-Latvia Treaty of Commerce and Navigation of June 22, 1923.	Exchange of most-favoured-nation treatment.
Lithuania.....	Canadian Trade Agreements Act of June 11, 1928, accepted Article 4 of Great Britain-Lithuanian agreement respecting commercial relations of May 6, 1922.	Exchange of most-favoured-nation treatment.
Netherlands, Netherlands Indies, Surinam and Curacao.	Convention of Commerce with Canada of July 11, 1924.	Exchange of most-favoured-nation treatment.
Norway.....	Convention of Commerce and Navigation between Great Britain and (Sweden and) Norway of March 18, 1826.	Exchange of most-favoured-nation treatment.
Portugal, including Madeira, Porto Santo, and Azores.	Canadian Trade Agreements Act of June 11, 1928, accepted Article 21 of Great Britain-Portugal Treaty of Commerce and Navigation of August 12, 1914.	Exchange of most-favoured-nation treatment.
Roumania.....	Exchange of Notes of September 30, 1930, under Article 36, Treaty of Commerce and Navigation between United Kingdom and Roumania of August 6, 1930.	Exchange of most-favoured-nation treatment.

Country	Treaty of Convention	Terms
Serb. Croat. Slovene Kingdom (Yugoslavia).	Canadian Trade Agreements Act of June 11, 1928, accepted Article 30 of United Kingdom Serb, Croat and Slovene Kingdom Treaty of Commerce and Navigation of May 12, 1927.	Exchange of most-favoured-nation treatment.
Spain.....	Spanish Treaty Act of June 11, 1928, sanctioned United Kingdom-Spain Treaty of Commerce and Navigation of October 31, 1922 (revised April 5, 1927), also United Kingdom-Spain Agreement of June 27, 1924, regulating treatment of companies.	Exchange of most-favoured-nation treatment.
Sweden.....	Convention of Commerce and Navigation between Great Britain and Sweden (and Norway) of March 18, 1826.	Exchange of most-favoured-nation treatment.
Switzerland.....	Treaty of Friendship, Commerce and Reciprocal Establishment between Great Britain and Switzerland of September 6, 1855.	Exchange of most-favoured-nation treatment.
Venezuela.....	Treaty of Amity, Commerce, and Navigation between Great Britain and Colombia (of which Venezuela was then part) of April 18, 1825.	Exchange of most-favoured-nation treatment.

Several of these countries have maximum and minimum schedules in their tariffs, meaning that there are reduced duties for practically all goods imported from reciprocating or treaty countries. Some countries, on account of rates conceded in treaties, maintain reduced duties on specified items of their tariffs. Many countries throughout the world have a uniform tariff regardless of the origin of the goods. The value to Canada of most-favoured-nation treatment in any country depends on its customs system and on the extent to which tariff favours apply to countries competing with Canada in the market in question.

### CANADIAN CUSTOMS ADMINISTRATION

Firms considering the establishment of branch plants in Canada and desiring information regarding Canadian customs laws, value for duty purposes, special or dumping duty, drawbacks, sales tax and excise duties are advised to communicate with the Department of National Revenue at Ottawa, Canada.

## CHAPTER IV

### FOREST, MINERAL, AND WATER POWER RESOURCES OF CANADA

- (1) FORESTS AND FOREST PRODUCTS INDUSTRY
- (2) MINERALS AND MINING INDUSTRY
- (3) FUEL RESOURCES
- (4) WATER POWER RESOURCES

#### (1) FOREST AND FOREST PRODUCTS INDUSTRIES OF CANADA

##### Forests

The forest industries of Canada are second in importance only to agriculture in value of production and exports and no other single group of industries have been of greater importance in stimulating commercial growth. The pulp and paper industry has become Canada's largest manufacturing industry while the lumber industry proper, if we include lumber processing plants, such as planing mills, sash and door, box and furniture factories, ranks second among the great industries of the Dominion.

In 1930 the industries included in the wood and paper group represented a capital investment of \$1,456,857,252. Woods operations employed \$246,000,000, the pulp and paper industry \$793,937,104, paper-using industries \$179,702,271, the lumber industry \$181,116,933, and wood-using industries \$146,100,944.

The total area covered by forests in Canada, including forested agricultural lands, is estimated at 1,153,000 square miles, of which 791,670 square miles is accessible and capable of producing merchantable timber. The forests on the remaining 361,330 square miles are of value chiefly for their influence on water control, climatic conditions and game conservation, but also as a source of wood for local use. Of the productive area 378,945 square miles carries timber of merchantable size and 412,725 square miles, young growth of various ages.

The climatic and soil conditions are particularly favourable to the growth of conifers and 61 per cent of the productive area is of the coniferous or softwood type, 27 per cent mixed softwoods and hardwoods, and only 12 per cent predominantly hardwood.

The Dominion may be divided into three main physiographical regions in which the forests have distinct characteristics, the Cordilleran, Great Plains, and Eastern regions.

In the Cordilleran region, which includes the Rocky Mountains and the Pacific slope, the forest is almost entirely coniferous, the principal commercial species being Douglas fir, western red cedar, western hemlock, Sitka and Englemann spruce, various species of true firs (balsam), western white, ponderosa and lodgepole pines, western larch, and yellow cedar. Owing to rugged topography and great variations in both altitude and latitude and consequently in temperature and moisture conditions, the forest types vary from the semi-arid flora of the Interior plateaux in British Columbia to the luxuriant growth of the Coastal belt.

The Great Plains region extends from the Rockies to Hudson Bay and north to the Arctic ocean. The commercial forests of the Prairie Provinces are confined to what is known as the Northern Forest Belt, a timbered strip 300 to 400 miles in width, which extends from Alaska to Labrador, covering the northern part of the Prairie Provinces, and extending northward as far as the limit of commercial tree growth. White spruce, black spruce, jack pine, balsam, tamarack, and poplar are the principal commercial trees. While enormous areas have been burned over, these forests still constitute an important timber resource.

The forests of the Eastern region are the centre of the most intense forest exploitation, particularly in the pulpwood field. Spruce, white pine, yellow birch, jack pine, hemlock, red pine and balsam are the principal species devoted to lumber and structural timber; spruce and balsam are the principal pulpwood species. Jack pine is cut for railway ties and it is also used to some extent for lumber and pulp. Eastern cedar is also an important wood, especially for shingles. Eastern Canada is the source of practically all the hardwoods produced—yellow birch, maple, elm, basswood, ash, and beech being the principal species.

### Ownership of Forests

In Canada the general policy of both the federal Government and the provincial Governments has been to dispose of the timber by means of licences to cut, rather than to sell timberland outright. Under this system the State retains the ownership of the land and control of the cutting operations. Revenue is derived in the form of annual ground rental, royalty or stumpage dues on the timber as cut, and stumpage bonuses,\* either in lump sums or in payments made as the timber is cut. Both ground rent and royalty dues may be adjusted at the discretion of the Governments so that the public may share in any increase in stumpage values, or, as has happened, reductions may be made in the rates if conditions demand them.

The Maritime Provinces did not adopt this policy to the same extent as did the rest of Canada. In Prince Edward Island all the forest land has been alienated and is in small holdings, chiefly farmers' woodlots. In Nova Scotia 76 per cent of the forest land is privately owned; in New Brunswick nearly 50 per cent; in Quebec, 7 per cent; Ontario 3.3 per cent; Manitoba, 11.3 per cent; Saskatchewan, 10.4 per cent; Alberta, 15.7 per cent, and British Columbia 13 per cent.

In Canada, as a whole, only 9.6 per cent of the forest land has been permanently alienated: on 13.2 per cent cutting rights are held under licence; and 77.2 per cent is not alienated in any form. Only 6.6 per cent has been permanently dedicated to forest production in provincial forest reserves and parks in which utilization is permitted.

Naturally, the more heavily timbered and accessible tracts have been alienated, so that on the basis of total timber content, it is estimated that about 10 per cent of the timber of merchantable size is in private ownership, 40 per cent under licence or lease, and 50 per cent still unalienated.

\*Bonus = bid in price at public auction either as a lump sum for the tract or on a per product unit. The unit for lumber is 1,000 ft. b.m.; for pulpwood, cords, etc.



## Stand of Timber

The total stand of timber in Canada is estimated to be approximately 267,733 million cubic feet, of which 165,843 million cubic feet is classed as accessible with the existing means of transportation. This consists of 290,230 million feet, board measure, which is large enough to be used for the manufacture of lumber, and 920 million cords of smaller material suitable for pulpwood, fuelwood, fencing, etc. Over 80 per cent of the accessible timber is softwood.

## ESTIMATE OF ACCESSIBLE STAND OF TIMBER IN CANADA BY SPECIES

Species	Saw material	Pulpwood, cordwood, etc.	Equivalent in standing timber
	Million feet b.m.	1,000 cords	1,000 cu. ft.
<b>SOFTWOODS—</b>			
Douglas Fir.....	35,695	5,100	8,413,905
Eastern White Pine.....	8,600	6,725	2,670,225
Western White Pine.....	910	500	257,790
Red Pine.....	2,805	2,965	961,200
Western Yellow Pine.....	1,000	500	277,500
Jack and Lodgepole Pine.....	18,535	99,195	15,664,980
Spruce.....	86,090	398,025	65,422,635
Balsam.....	28,615	127,830	21,222,795
Hemlock.....	34,715	16,705	9,557,070
Cedar.....	37,110	15,255	9,911,925
Yellow Cypress.....	1,680	500	426,420
Larch.....	1,650	1,845	577,215
Total Softwoods.....	257,405	675,145	135,363,660
<b>HARDWOODS—</b>			
Poplar.....	8,815	97,985	11,239,060
White Birch.....	6,430	60,820	7,186,070
Total Intolerant.....	15,245	158,805	18,425,130
Yellow Birch.....	9,940	36,925	5,684,735
Maple.....	4,950	27,300	3,677,550
Beech.....	825	8,345	973,450
Basswood.....	450	2,335	320,375
Ash.....	200	2,460	277,500
Elm.....	630	7,600	859,970
Oak.....	95	980	113,905
Cottonwood.....	490	400	145,310
Alder.....	—	10	950
Total Tolerant.....	17,580	86,305	12,052,535
Total Hardwoods.....	32,825	245,160	30,478,875
Grand Total.....	290,230	920,305	165,842,535

## THE CANADIAN INDUSTRIAL FIELD

## ESTIMATE OF ACCESSIBLE STAND BY REGIONS

	Saw material	Pulpwood, cordwood, etc.	Total equivalent in standing timber
	Million ft. b.m.	1,000 cords	Million cu. ft.
EASTERN PROVINCES—			
Softwood.....	90,315	560,560	85,365
Hardwood.....	24,515	167,410	21,273
Total.....	114,830	727,970	106,638
PRAIRIE PROVINCES—			
Softwood.....	12,480	62,615	10,059
Hardwood*.....	7,810	76,820	9,008
Total.....	20,290	139,435	19,067
BRITISH COLUMBIA—			
Softwood.....	154,610	52,000	39,943
Hardwood.....	500	930	198
Total.....	155,110	52,930	40,141
CANADA—			
Softwood.....	257,405	675,145	135,364
Hardwood.....	32,825	245,160	30,479
Total.....	290,230	920,305	165,843

\*Nearly all poplar.

## Forest Utilization

During the years 1926-30 the average annual cut for all purposes amounted to the equivalent of approximately 2,973 million cubic feet of standing timber. The exports of forest products represented 1,277 million cubic feet, and imports 92 million cubic feet, indicating a home consumption of 1,788 million cubic feet.

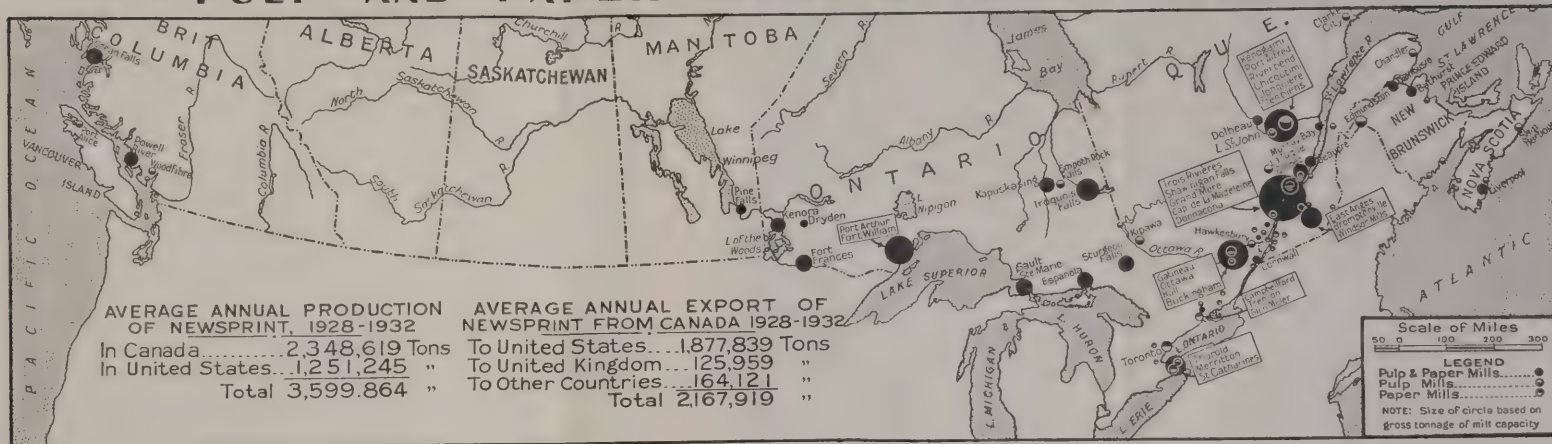
The United States market absorbs all of Canada's pulpwood exports and approximately 85 per cent of her pulp and paper shipments, the remainder going to widely-distributed overseas markets. Altogether, Canada has been exporting annually to the United States the equivalent of over 1,000 million cubic feet of wood.

Within the British Empire, Canada is the chief source of coniferous timber and of certain hardwoods such as maple and birch. Her exports of lumber, both to Empire and outside markets, are steadily increasing.

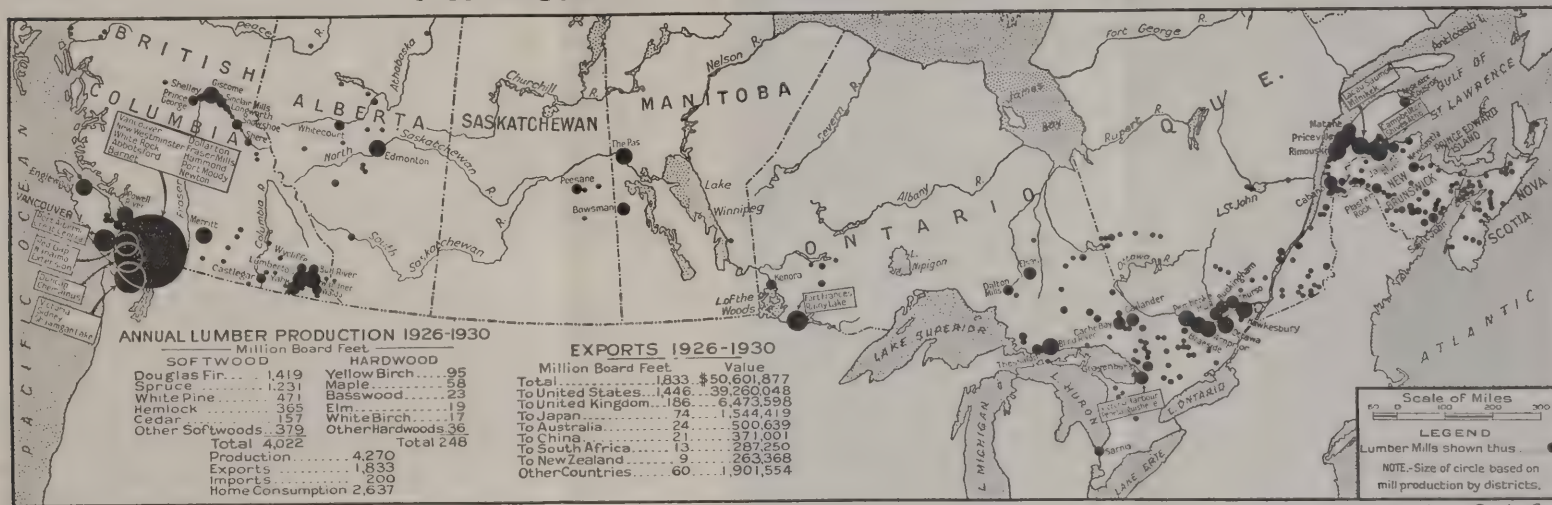
The latest statistics list some 4,136 manufacturing industries in Canada which depend primarily on wood and wood-products for their raw materials. Among these the lumber and the pulp and paper industries are outstanding. Canada is the world's largest producer of newsprint paper, and of spruce sulphite pulp for the manufacture of rayon.

# FOREST INDUSTRIES

## PULP AND PAPER MANUFACTURING CENTRES



## PRINCIPAL LUMBER CENTRES



Prepared by Forest Service, Canada.





## Products of Woods Operations

CHIEF PRODUCTS OF WOODS OPERATIONS IN CANADA, AVERAGE  
1926-1930

Primary products	Quantity produced	Equivalent in standing timber	Total value
		1,000 cu. ft.	\$
Logs and bolts.....	5,192,986 M ft. b.m.	1,137,264	79,548,295
Pulpwood.....	6,078,573 cords	711,193	71,376,590
Fuelwood.....	9,611,223 "	913,066	41,466,084
Distillation wood.....	49,318 "	6,066	442,621
Hewn ties.....	8,661,864 pieces	103,942	5,935,200
Poles.....	1,109,131 "	14,419	5,224,421
Fence posts.....	15,084,165 "	30,168	1,473,290
Rail rails.....	5,390,303 "	10,781	487,432
Piling.....	3,303,000 lin. feet	1,083	294,169
Round mining timber.....	7,604,180 cubic feet	12,873	1,227,143
Miscellaneous products and exports	255,641 cords	29,910	2,707,420
Total.....	—	2,970,765	210,182,665

## Forest Administration

## Dominion Government

As a result of the transfer of the Dominion lands to the four western provinces in 1930, all of the provinces now administer their own Crown timber lands. The Dominion Government, through the Department of the Interior, still retains authority in the Northwest Territories, the Yukon, and the National Parks.

The Dominion Forest Service continues to function in the fields of forest and forest products research, by maintaining various experiment stations to study silvicultural problems, and forest products laboratories at Ottawa, Montreal, and Vancouver, to study and solve the problems of the wood-using industries.

The Forest Service, with provincial co-operation, is conducting a comprehensive inventory of the forest resources of Canada. It also carries on special investigations relative to fire hazards affecting forests, and functions as a general clearing house for information regarding the forest resources of the Dominion, the production of and trade in forest products and all matters pertaining to forest economics.

## British Columbia

The Forest Branch of the Department of Lands is the forest authority of the province. It was established by the British Columbia Forest Act of 1912, which placed under its jurisdiction the entire administration of the forests, including the disposal of timber, collection of revenue, regulation of cutting, forest protection, reforestation, and market extension.

The British Columbia Taxation Act imposes a tax of  $1\frac{1}{2}$  per cent on the assessed valuation of privately-owned timberland carrying over 8,000 board feet per acre west of the Cascades, and 5,000 board feet east of that range. The holders of all alienated Crown lands and taxable private timberlands as well as

licensees contribute on an acreage basis to a forest protection fund towards which the government provides an equal (or usually greater) amount.

**CROWN LAND.**—Most of the alienated timber is held under special licences, which are limited to 640 acres each. They are renewable annually in perpetuity, subject to cutting regulations, royalties, and rentals. After cutting, the licence may lapse, or renewal may be refused at any time if the land is required for agriculture. An annual ground-rent or licence fee of \$140 per square mile is charged west of the Coast-Cascade mountains and \$100 per square mile east of that range. There is also a scale of royalties which are adjusted at intervals of five years, and in the case of logs it varies as to whether on the coast or in the interior and as to the species and quality. Other products, such as ties, poles, pulpwood, etc., carry individual rates.

Pulp leases are granted for twenty-one year terms, renewable, the ground rent charge being one-half that for special licences.

Since 1908, Crown timber has been disposed of only by timber sales, which are awarded after public competition to the one bidding the highest stumpage price. Each sale contract specifies the period within which operations are required to be completed. The ground-rent is the same as on special licences.

**PRIVATELY OWNED LANDS.**—Timber cut from land granted prior to April 7, 1887, is free of royalty. Timberlands purchased subsequent to that date and prior to March 12, 1906, are subject to a royalty of 50 cents per thousand feet board measure, and the logs may be exported without charge. Lands granted after March 12, 1906, till March 1, 1914, are subject to a royalty of 50 cents per thousand feet board measure, and the logs are not exportable. Timber cut from lands granted since March 1, 1914, is subject to the same royalty as special licences and must be manufactured in the province.

**HOME MANUFACTURE.**—To encourage home industry, the exportation of unmanufactured wood (logs, bolts, poles, piling, etc.) from all Crown lands (leases, licences, and timber sales), and private lands granted since March 12, 1906, is prohibited, except by special permit. These export permit applications are passed on by an Advisory Committee who review the situation and report to the government.

**TIMBER MEASUREMENT.**—All timber for which a royalty is payable is scaled and graded by government scalers. A small fee which pays for this service is charged.

### Prairie Provinces

Upon the transfer of resources in 1930, Manitoba, Saskatchewan, and Alberta each organized a Forest Service, recruited mainly from the previous federal administration.

The timber regulations are substantially the same as under the federal regime, embodying the principle of competitive disposal by licence or timber sales; a ground rent of \$10 per square mile; a schedule of royalties for various products; and a fire protection charge of half the actual cost incurred. All existing Dominion timber licences remain in force, and all timber cut from Crown lands must be manufactured in Canada.

### Ontario

Forest administration is under the Department of Lands and Forests, the Timber Administration Branch controlling the disposal of timber and the collection of revenue from the forests, while the Forestry Branch has charge of

reforestation, forest protection, forest surveys, and investigations. The Crown Timber Act with the regulations framed thereunder, governs all timber disposal procedure.

Merchantable timber is disposed of by tender and the licence is granted to the person offering the highest stumpage bonus per product unit in excess of Crown dues or royalty. The royalty and bonus are payable as and when the timber is cut. A timber berth holder must also pay a ground rental and a fire protection tax. These rates and the royalty are subject to change by Order in Council. The timber is measured in the woods by licenced scalers.

Pulpwood concessions, good for 21 years, are granted, subject to special conditions. No saw, pulp, or paper mill may be operated except under a licence complying with the Mills Licensing Act.

The Timber Cutting Regulation Act clothes the Minister of Lands and Forests with full power to fix the size and kind of timber which may be cut from Crown lands and on patented lands where the timber is reserved to the Crown. All timber cut on Ontario Crown lands, except poplar, must be manufactured in Canada.

Under the Assessment Act, a woodland owner may, on application, secure exemption from taxation on his woodlot up to 10 per cent, but not exceeding 20 acres.

#### Quebec

In 1909, the Quebec Forest Service was created, within the Department of Lands and Forests, and given full charge of the administration of timber lands and matters relating to forestry, including classification of land, disposal of timber, regulation of logging operations, scaling of timber, collection of revenue, and reforestation. In 1925 all fire protection work was placed under a special Forest Protection Service.

Licences to cut timber are disposed of by public competition to the bidder of the highest stumpage bonus in excess of an upset price and the regular royalty on timber cut. The successful tenderer must also pay an adjudication price per square mile, which is fixed for each licence. An annual ground rental is also charged. Licences are renewable from year to year, but the rate of royalty and of ground rent may be changed by the Government at any time. The export of unmanufactured wood from Crown lands is prohibited. The timber cut is measured by licenced scalers. Minimum diameter limits to which the timber may be cut are fixed, but modifications are allowed when working plans acceptable to the Forest Service show that such are necessary for the best silvicultural practice. Proposed cutting areas and logging operations are inspected by the forest engineers of the Service, and when deemed advisable, the amount to be cut is prescribed. It is the aim of the Department to limit the cut to 80 per cent of the increment. Licences are required to provide fire protection on their limits and this is done by the formation of forest protection associations.

#### New Brunswick

The Forests Service is under the Department of Lands and Mines. Timber cutting privileges are granted under annually renewable term licences disposed of by public auction. They are subject to a minimum bonus varying from 20 to 100 dollars per square mile for licences to cut saw material and up to 130 dollars per square mile for licences to cut pulpwood. The pulp licence term is 50 years and the saw-mill licence 10 or 30 years. An annual rental is charged, and a stumpage royalty is payable as timber is cut.

All timber cut on Crown lands must be measured by licensed scalers.

Every species of timber, save poplar, cut on Crown land, must be manufactured in Canada, except that where shown in the public interest, export may be permitted under such terms as the Governor in Council deems just.

All private forest holdings in tracts of 50 acres or over pay a wild land tax of two cents per acre.

#### Nova Scotia

The forests are administered by the Minister of Lands and Forests. Timber is disposed of in much the same manner as in the other provinces, and forest protection is well organized.

For further information in regard to forest administration apply to the following:—

British Columbia—Chief Forester, Department of Lands, Victoria, B.C.

Alberta—Director of Forests, Department of Lands and Mines, Edmonton, Alberta.

Saskatchewan—Director of Forests, Department of Natural Resources, Regina, Saskatchewan.

Manitoba—Provincial Forester, Department of Mines and Natural Resources, Winnipeg, Manitoba.

Ontario—Deputy Minister of Forestry, Department of Lands and Forests, Toronto, Ont.

Quebec—Chief of the Forest Service, Department of Lands and Forests, Quebec, P.Q.

New Brunswick—Chief Forester, Department of Lands and Mines, Fredericton, N.B.

Nova Scotia—Minister of Lands and Forests, Halifax, N.S.

#### (2) THE MINERALS AND MINING INDUSTRY OF CANADA

Canada in the past decade has risen to a position of prominence in the world trade of several mineral products including gold, silver, copper, lead, zinc, nickel, aluminium, and asbestos. The stability of that position is emphasized by the fact that during 1932, despite reduced demand and greatly depreciated prices, Canada's percentage of the world's output of many of these metals has increased.

Canada now ranks as the world's second greatest gold-producing country. Her production of this metal has risen 140 per cent in the past ten years and the possibilities for still greater increases are most promising.

In the field of base metals, foreign countries absorb even under present conditions about \$23,000,000 worth of Canada's output of copper, lead, and zinc; and the world will continue, in the absence of new discoveries, to be



dependent upon the remarkable ore bodies of the Sudbury district of Ontario for at least nine-tenths of the nickel it requires. Foreign trade in the important non-metallics, asbestos and gypsum, has undoubtedly been stimulated by the close proximity of United States, one of the world's largest consumers of these minerals.

In respect to the great triad of modern commerce, coal, iron, and petroleum, Canada is not so fortunately placed. Reserves of coal are large but they are situated in the extreme western and eastern sections of the country, supplying the bulk of the requirements in those areas, but leaving Central Canada largely dependent on imported coal, mainly from the United States, although the tonnage from Great Britain, principally anthracite, has much increased recently. For all her supplies of iron ore Canada depends upon imports and will doubtless continue to do so until the beneficiation of the lower grade, domestic iron ore proves economical. Canada is also deficient in known reserves of petroleum although it is hoped that large reservoirs will be eventually tapped in Western Canada.

### Minerals by Natural Divisions

Canada, with an estimated area of 3,684,723 square miles, embraces rather more than half of the main block of North America. Perhaps the simplest method of dealing with the minerals and mining activities in this vast territory is to consider them under the general outlines of five of its great natural regions or divisions, namely:—

1. The Precambrian Shield.
2. The Pacific Coast Region.
3. The Western Plains.
4. The St. Lawrence Lowlands.
5. The Appalachian Region.

#### 1. The Precambrian Shield

The most outstanding of these divisions from the standpoint of minerals, is the Precambrian or Canadian Shield. It covers over half the land area of Canada including 95 per cent of Quebec, three-fourths of Ontario, two-thirds of Manitoba, one-third of Saskatchewan, the northeast corner of Alberta, and the eastern three-quarters of the Northwest Territories.

The economic minerals mined within this area, comprising about 40 per cent of the total value of the Dominion output, cover a wide field. In the range of metallics, are arsenic, cobalt, copper, gold, lead, molybdenum, nickel, silver, and zinc. Over 90 per cent of the world's nickel and about half the cobalt are mined there. In association with nickel-copper ores are found valuable amounts of the metals of the platinum group while other by-product metals of the Precambrian include selenium and bismuth. Recent discoveries in the far north have added radium to the list. Iron ores are known to occur in several of its districts and were formerly produced in quantity in the Lake Superior region.

The deposits of non-metallic ores are by no means unimportant, including apatite, barytes, corundum, feldspar, fluorite, graphite, magnesite, mica, pyrite, quartz, talc, building and ornamental stone, ceramic and other clays, and other structural materials.

The most important mining region in the Precambrian is that of Northern Ontario, embracing the famous Porcupine and Kirkland Lake gold camps and the fabulously rich nickel-copper ores of Sudbury. Concentrated in this relatively small area of a few thousand square miles occur metallic ore bodies which account for over three-quarters of the total mineral output of the Canadian Shield, and about one-third of the total Canadian mineral output. Here are situated the famed Hollinger and Lake Shore gold mines, the Frood nickel-copper mine with enormous ore reserves, the renowned Cobalt silver area, now almost exhausted, the newer silver fields of Gowganda and South Lorrain, also at low ebb of production owing to the low price of silver, and at least two new gold areas of promise.

Second in importance among Precambrian mining districts is the Rouyn area of Northwestern Quebec where a substantial production of copper and gold is obtained from copper-gold and gold ores. Closely following the Rouyn area in importance is the Flin Flon mining district of Northwestern Manitoba where copper-zinc ores carrying gold and silver are being mined and treated on a large scale.

Owing to the low price of base metals present mining activity is mainly confined to gold, although the recent discovery and development of radium-silver and silver ores in the Great Bear Lake district of the Northwest Territories is worthy of note. Renewed activity in the search for gold in all parts of the Shield has already resulted in many new discoveries and the reopening of several old gold properties in such districts as Central Manitoba, Island and God's Lake, and Herb-Beaver-Elbow lakes in Manitoba; Red Lake, Thunder Bay, Michipicoten, Swayze-Halcrow, Matachewan, Kirkland Lake, and Porcupine in Ontario; and the gold belt of Northwestern Quebec extending for well over 100 miles from the Ontario boundary, embracing among others the Rouyn, Siscoe-Cadillac, Duparquet and Pascalis-Louvicourt areas.

Although the advent of the aeroplane has greatly facilitated exploration large stretches of favourable Precambrian prospecting ground yet await the prospector.

## 2. The Pacific Coast Region

The Pacific Coast or Cordilleran region is pre-eminently noted for its metal mines. Within its confines, which include all of British Columbia and the Yukon, a part of western Alberta and a small section of the Northwest Territories, about 22 per cent of the value of the metallic output of Canada was produced in 1931, including 99 per cent of the lead, 85 per cent of the zinc, 57 per cent of the silver, 23 per cent of the copper, and 8 per cent of the gold.

Lead-zinc-silver ores are widespread, notably in southern British Columbia. There is found the Sullivan mine, the largest lead-zinc mine in the British Empire and one of the world's greatest. High-grade silver-lead ores are mined in the Mayo district of the Yukon.

The most important deposits of copper occur near Anyox in the Portland Canal district, at Britannia Beach a few miles north of Vancouver, and at Copper Mountain, near Princeton, the last named property now closed.

The gold production of this region is obtained from placer and lode sources and from base metal ores. Lode gold from the Bridge river district, from the gold-silver ores of the Portland Canal district, and from a number of small

properties scattered throughout the area provide the greater part of the output. Alluvial gold, comprising about 8 per cent of the total, comes largely from the Klondike district of the Yukon followed by the Atlin and Cariboo districts. Considerable gold is also extracted in the treatment of copper, lead and zinc ores. Bismuth and cadmium are recovered during by-product operations at Trail.

Coal is the most important non-metallic mined, about one-sixth the value of the coal produced in Canada originating in Pacific coast areas, the mines on the east coast of Vancouver Island furnishing nearly half this output. The remainder is mined mainly in the Crowsnest and other coalfields along the southern Rockies and in the Nicola-Princeton area. Other important non-metallics include diatomite, fluorspar, gypsum, pyrite, and a wide range of structural materials.

### 3. The Western Plains

The Western or Interior Plains include the major portions of Alberta and Saskatchewan, the southwestern corner of Manitoba, and most of the western quarter of the Northwest Territories.

Coal, varying in grade from lignite to semi-anthracite, is the leading item of mineral output. Other minerals include gypsum, natural gas, petroleum, salt, sodium sulphate, and structural materials such as clay, stone, sand and gravel.

The coal fields of this region constitute one of Canada's greatest potential mineral resources. In "The Coal Resources of the World," published in 1913, Canada was credited with coal reserves equivalent to 17 per cent of the entire world reserves. Of the Canadian total, nearly nine-tenths lies in the western plains, with Alberta possessing the major share. Saskatchewan's reserves comprise the lignites found in the southern part of the province from which an increasing consumption is noted, both in the raw state and as manufactured briquettes.

Crude petroleum was first discovered in the Turner Valley field of Alberta in 1914, but it was not until 1924 that the value of the field was realized. Numerous wells have since been drilled, resulting in an increase in production from 180,000 barrels in 1925 to approximately 500,000 barrels in 1928 and culminating in an output of about 1,400,000 barrels in 1931. Since then the output has been somewhat curtailed due to gas conservation measures. A feature which stamps the Turner Valley as one of the most remarkable areas of its kind in the world is the fact that over 80 per cent of the yield is high-grade naphtha.

Natural gas was first found in Alberta in 1885, and the production increased to over 19,000,000 M. cu. ft. in 1929, falling off to 17,800,000 M. cu. ft. in 1931. There are at least fourteen gas fields scattered throughout Alberta from the Rogers-Imperial in the extreme south to the Peace River field in the north. Several of these are supplying large quantities of gas for domestic and industrial purposes, while others not so fortunately situated still await markets.

Gypsum is mined in quantity at two locations in Manitoba and quartz sand is obtained for glass manufacture on an island in Lake Winnipeg. Salt is being recovered in both Saskatchewan and Manitoba and a substantial output of sodium sulphate comes from Saskatchewan. A considerable tonnage of building stone, mainly limestone, is quarried in Manitoba.

Refractory clays are found in Saskatchewan in greater variety and greater abundance than in any other province.

#### 4. The St. Lawrence Lowlands

In this fertile plain, which includes, in its area of over 35,000 square miles, the greater part of the agricultural and manufacturing sections of southern Ontario and Quebec, no metallic minerals of importance are found. The leading non-metals are gypsum, natural gas, petroleum, and salt, all found in southwestern Ontario, together with an abundance of structural materials, including clays suitable for the manufacture of brick, tile, etc., occurring at intervals throughout the entire region.

Over 90 per cent of Canada's salt output is recovered from salt beds adjacent to the shores of Lake Huron and Lake St. Clair, and gypsum is quarried from deposits along the Grand river and in the vicinity of Willow Grove near Hagersville. An oil-field, situated in the southwestern extremity of the peninsula between Lakes Huron and Erie, supplied all the Canadian output of crude petroleum until 1909 and still is an important factor in augmenting Canada's scanty supply of this commodity. Natural gas is found in the counties bordering the north shore of Lake Erie. This field with a record of nearly 35 years' production still has over a thousand active gas wells.

#### 5. Appalachian Region

The Appalachian or Maritime area includes in its scope the provinces of Nova Scotia, New Brunswick, Prince Edward Island, and the Eastern Townships and Gaspé peninsula of Quebec.

Coal is by far the most important mineral product, providing over half the bituminous coal mined in the Dominion. The most important deposits are found in the submarine coal field of the Sydney area of Cape Breton, the Pictou and Cumberland fields on the mainland of Nova Scotia, and the Minto field of New Brunswick.

Commercial deposits of long fibre asbestos, the "fire-proof wool" of commerce, are found in but a few countries and it is from the Eastern Townships of Quebec that much of the world's supply of high-grade chrysotile spinning fibre has been obtained. Since 1877, when the deposits now being worked were discovered, over  $4\frac{1}{2}$  million tons of long and short fibre and asbestos waste, valued at more than \$160,000,000, have been marketed.

Another important non-metal mined in the Maritime areas is gypsum. Extensive beds of this dazzling white mineral are prevalent in a belt of rocks extending from southeastern New Brunswick across northern Nova Scotia to Cape Breton. The principal producing districts are found in Hants, Inverness, and Victoria Counties in Nova Scotia, and in the Hillsborough area of New Brunswick.

Other non-metallics occurring in this region include the only producing rock salt property in Canada situated at Malagash, Nova Scotia, a small active petroleum and natural gas field at Stony Creek near Moncton, New Brunswick, and deposits of such minerals as sandstone (for grindstones and pulpstones), diatomite, manganese, barytes, quartz, graphite, oil shales, clays, building stone and other structural materials.





100

100

As relatively large areas of the Maritime region have been subjected to disruptive igneous activity accompanied by intrusions, it might be expected that economic deposits of metallic ores would be widespread. Although this expectation has not yet been realized, the district has already produced about \$19,000,000 worth of gold, considerable iron ore and copper pyrites, and intermittent shipments of antimony, chromite, copper, manganese and tungsten ores. Sizable lead-zinc deposits exist in Gaspé and a developed lead-silver-copper property at Sterling, Cape Breton, awaits better metal prices before reopening. Other interesting occurrences include copper and antimony in New Brunswick, and copper and lead in Nova Scotia.

### Mineral Production

The growth in the output of minerals in Canada during the past half century has been phenomenal—from a production of less than \$4,000,000 in 1878 to \$64,421,000 in 1900, to \$137,109,000 in 1915 and to \$274,989,000 in 1928. During the period 1921-29 the figures are still more impressive, showing an increase from \$171,923,000 to \$310,850,000 in 1929, an advance of 81 per cent in 8 years. Since the peak year 1929, the value of production has fallen rapidly, to \$228,029,000 in 1931 and to \$182,701,000 in 1932. Perhaps a truer perspective of the inherent stability of Canada's mining industry during these years of depression may be obtained from the following comparison of the quantities of the various important minerals produced, which shows a sizable increase in gold and exceedingly moderate declines, considering the adverse conditions, for the other minerals excepting coal, nickel, asbestos, and gypsum.

QUANTITIES OF IMPORTANT MINERALS PRODUCED 1929-1932

	1929	1930	1931	1932
Gold.....fine oz.	1,928,000	2,102,000	2,693,000	3,055,000
Coal.....short tons	17,497,000	14,881,000	12,243,000	11,787,000
Copper.....lbs.	248,121,000	303,478,000	292,304,000	240,876,000
Nickel.....lbs.	110,276,000	103,769,000	65,666,000	29,275,000
Lead.....lbs.	326,523,000	332,894,000	267,342,000	256,344,000
Silver.....lbs.	23,143,000	26,444,000	20,562,000	18,334,000
Zinc.....lbs.	197,267,000	267,644,000	237,245,000	171,748,000
Natural gas.....M cu. ft.	28,378,000	29,377,000	25,875,000	23,655,000
Petroleum.....bbls.	1,117,000	1,522,000	1,543,000	1,050,000
Asbestos.....short tons	306,000	242,000	164,000	118,000
Gypsum.....short tons	1,212,000	1,071,000	864,000	485,000
Salt.....short tons	330,000	272,000	259,000	265,000

## VALUE OF MINERAL PRODUCTION IN CANADA BY PROVINCES, 1931

	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Dominion Total	
	\$	\$	\$	\$	\$	\$	\$	\$	Quantity <sup>a</sup>	Value \$
<b>METALLICS—</b>										
Arsenic.....	—	—	—	135,170	—	—	—	—	lb.	3,575,936
Bismuth.....	—	—	—	3,532	—	—	—	154,118	"	118,207
Cadmium.....	—	—	—	651,179	—	—	—	180,958	"	65,179
Cobalt.....	—	—	—	9,096,463	3,835,254	—	—	5,459,194	"	521,051
Copper.....	9,509	—	5,723,154	43,117,602	2,128,558	—	—	3,308,920	fine oz.	292,304,300
Gold.....	—	—	6,203,101	15,267,457	—	—	4,031	7,097,812	lb.	267,342,482
Iron.....	—	—	—	2,812,834	—	—	—	—	"	65,666,320
Lead.....	—	—	—	15,267,457	—	—	—	—	fine oz.	15,267,453
Nickel.....	—	—	—	32,108	7,353	—	—	1,783	lb.	2,814,617
Platinum metals.....	—	—	—	2,222,014	249,877	—	9	2,408,000	fine oz.	20,562,247
Selenium.....	14	—	158,414	—	898,338	—	—	5,160,911	lb.	6,141,943
Silver.....	2,406	493	10,261	280	—	—	—	—	237,245,451	13,434
Zinc.....	—	—	—	—	—	—	—	—	—	—
Miscellaneous.....	—	—	—	—	—	—	—	—	—	—
<b>Total.....</b>	<b>11,923</b>	<b>493</b>	<b>12,094,930</b>	<b>73,380,280</b>	<b>7,119,380</b>	<b>—</b>	<b>4,040</b>	<b>23,773,085</b>	<b>—</b>	<b>118,524,439</b>
<b>NON-METALLICS (Fuels)—</b>										
Coal.....	19,016,720	743,190	—	—	3,791	945,250	13,342,675	7,150,996	tons	12,243,211
Natural gas.....	—	323,184	—	4,635,497	180	—	4,067,890	—	M cu. ft.	25,874,725
Peat.....	—	15,461	5,937	1,096	—	—	—	—	tons	1,674
Petroleum, crude.....	—	—	—	219,993	—	—	3,976,220	—	brls.	1,542,573
<b>Total.....</b>	<b>19,016,720</b>	<b>1,081,841</b>	<b>5,937</b>	<b>4,856,586</b>	<b>3,977</b>	<b>945,250</b>	<b>21,386,788</b>	<b>7,150,996</b>	<b>—</b>	<b>54,453,143</b>
<b>OTHER NON-METALLICS—</b>										
Asbestos.....	—	—	4,812,886	—	—	—	—	2,270	tons	164,296
Diatomite.....	29,679	—	—	840	—	—	—	—	"	1,610
Feldspar.....	—	—	86,842	100,119	—	—	—	—	"	18,343
Graphite.....	—	—	—	32,149	—	—	—	—	"	32,149
Grindstones.....	878,487	12,308	—	374,469	231,124	—	—	25,795	"	621
Gypsum.....	—	451,264	—	—	—	—	—	176,173	"	863,752
Iron oxides.....	—	—	48,205	—	—	—	—	1,000	"	5,520
Manganese.....	—	—	295,579	23,465	—	—	—	—	"	11,411
Magnesite.....	—	—	30,601	148,642	76,624	—	—	1,297	"	1,339
Quartz.....	6,836	—	69,759	1,760,388	—	—	—	—	"	193,724
Salt.....	143,761	—	—	13,702	—	—	—	—	"	259,047
Silica brick.....	22,044	—	34,439	—	—	—	—	—	M	900
Soapstone.....	—	—	—	—	—	—	—	—	"	34,439
Sodium sulphate.....	—	—	108,617	65,080	—	421,097	—	255,760	"	50,107
Sulphur (pyrites, etc.).....	—	—	—	122,044	—	—	—	600	"	122,044
Talc.....	—	462	4,746	9,654	—	2,560	4,060	7,351	"	11,836
Miscellaneous <sup>b</sup> .....	363	—	—	—	—	—	—	—	—	—
<b>Total.....</b>	<b>1,081,170</b>	<b>464,034</b>	<b>5,491,674</b>	<b>2,650,552</b>	<b>307,748</b>	<b>423,657</b>	<b>4,060</b>	<b>470,246</b>	<b>—</b>	<b>10,893,141</b>



VALUE OF MINERAL PRODUCTION IN CANADA BY PROVINCES, 1931—*Concluded*

	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Dominion Total	
	\$	\$	\$	\$	\$	\$	\$	\$	Quantity <sup>a</sup>	Value \$
<b>CLAY PRODUCTS—</b>										
Brick—building, com- mon, face, ornamental, etc.....	76,763	96,851	1,690,270	1,958,560	94,625	44,499	110,541	173,318	M	4,245,427
Brick—sewer.....	—	—	—	33,321	—	—	—	10,771	M	234,800
Brick—fire.....	240	—	—	—	—	24,568	1,193	81,590	M	2,253
Fireclay blocks and shapes.....	825	535	—	—	—	63,603	—	18,076	tons	2,248
Hollow blocks.....	86,652	16,706	477,720	346,079	15,703	28,299	42,276	33,219	M	105,635
Drain tile.....	6,611	127	24,864	244,368	17,300	—	1,721	38,419	M	12,518
Floor tile (quarries).....	—	—	—	31,395	—	20	—	—	sq. ft.	107,499
Sewer pipe, copings, flue manholes, etc.....	295,405	27,199	168,054	696,964	—	—	227,305	121,075	—	1,046,634
Porter blocks.....	650	1,930	—	73,760	—	1,031	146,502	8,533	—	12,328,410
Other clay products.....	—	—	—	168,253	—	4,237	178	13,898	—	31,415
Total.....	467,126	143,348	2,360,908	3,552,800	122,628	166,257	529,716	498,505	—	1,508,803
<b>OTHER STRUCTURAL MATERIALS—</b>										
Cement.....	—	—	7,092,895	5,006,826	1,267,893	—	1,286,080	1,172,549	brls.	15,826,243
Lime.....	79,418	127,054	804,218	1,232,270	307,401	—	46,785	277,669	tons	2,344,148
Sand and gravel.....	198,757	18,146	1,952,959	2,862,474	294,178	396,707	313,016	211,348	M	6,051,165
Stone.....	225,632	341,991	5,893,042	2,881,444	642,649	—	9,642	1,080,784	—	11,075,184
Total.....	503,807	487,194	15,743,114	11,673,017	2,412,121	396,707	1,656,123	3,444,924	—	36,317,007
Grand total, 1931....	21,080,746	2,476,916	35,696,563	96,113,235	9,965,854	1,931,886	23,580,727	35,337,756	—	228,029,018
" 1930.....	27,019,367	2,488,571	41,215,246	113,540,976	5,453,182	2,368,612	30,427,747	54,953,326	—	279,873,578
" 1929....	30,504,483	2,439,072	46,358,285	117,662,505	5,423,825	2,253,506	31,739,986	68,162,878	—	310,850,246

The 1931 production of the Yukon was valued at \$2,145,347 as compared with \$2,531,588 in 1930, and \$2,965,736 in 1929. The 1931 output included silver \$1,103,615; gold, \$915,960; lead, \$120,724; and coal, \$5,039.

<sup>1</sup> Includes manganese ore (N.S.) \$2,400, (N.B.) \$493; molybdenite concentrates (Ont.) \$289; titanium ore (P.Q.) \$10,261.

<sup>2</sup> Includes actinolite (Ont.) \$456; barytes (N.S.) \$363; bituminous sands (Alta.) \$4,060; fluorspar (Ont.) \$620; bog manganese (N.B.) \$402; mineral water (P.Q.) \$4,746; (Ont.) \$8,578; sodium carbonate (B.C.) \$7,351; volcanic dust (Sask.) \$2,560.

<sup>3</sup> Tons consist of 2,000 lbs.

## Mineral Industries

The mineral industries rank third in point of value and first in point of public interest among Canada's developed resources. The following table briefly summarizes the more important statistical items.

## MINERAL PRODUCING INDUSTRIES IN CANADA, 1931

INDUSTRIES	Number of firms	Capital employed \$	Number of employees	Salaries and wages \$	Income from sales \$
<b>Metal Mining—</b>					
Alluvial gold.....	109	5,908,001	337	682,935	1,226,541
Auriferous quartz.....	68	109,933,164	9,636	16,467,165	49,144,368
Copper-gold-silver.....	53	37,127,920	3,351	4,958,317	15,951,103
Silver-cobalt.....	22	9,352,520	786	1,149,689	1,925,593
Silver-lead-zinc.....	39	31,152,078	1,299	2,149,921	6,351,975
Nickel-copper.....	3	21,320,977	2,133	3,150,240	7,539,836
Miscellaneous.....	7	444,179	32	25,694	13,434
Smelting and refining.....	11	175,669,195	7,860	13,245,327	50,229,454*
Total.....	312	390,908,034	25,434	41,829,288	132,382,304
<b>Non-metal Mining, including fuels—</b>					
Coal.....	412	135,712,866	27,860	28,802,428	37,762,927
Natural gas.....	145	71,085,678	1,692	2,072,022	8,232,822
Petroleum.....	160	57,620,950	1,209	1,634,517	4,733,287
Abrasives.....	8	569,772	31	25,837	73,452
Asbestos.....	7	40,164,005	1,675	1,836,115	4,812,886
Feldspar and quartz.....	33	1,342,668	166	135,809	490,119
Gypsum.....	17	7,941,082	676	656,590	2,111,517
Iron oxides.....	4	181,535	30	29,194	49,205
Mica.....	11	276,356	28	22,556	54,066
Salt.....	7	4,196,927	363	446,984	1,904,149
Talc and soapstone.....	5	618,590	70	71,787	157,083
Miscellaneous.....	34	5,457,930	275	297,394	1,247,697
Total.....	843	325,168,359	34,075	36,031,233	61,629,210
<b>Clay Products and Other Structural Materials—</b>					
Brick and tile.....	171	33,159,664	3,131	3,428,142	7,585,310
Clay sewer pipe.....					
Fire clay products and other clays					
Stoneware and pottery.....					
Cement.....	9	57,378,436	1,820	2,432,950	15,826,243
Lime.....	54	7,289,990	799	785,868	2,764,415
Sand and gravel.....	704	8,635,241	3,224	2,878,011	6,651,165
Stone.....	300	18,860,796	4,198	4,470,699	11,075,184
Total.....	1,242	125,983,627	13,300	14,108,778	44,158,295
GRAND TOTAL.....	2,397	842,060,020	72,809	91,969,299	238,169,809
<b>PROVINCES</b>					
Nova Scotia.....	69	63,853,580	14,871	15,302,444	19,258,296
New Brunswick.....	52	5,543,570	1,197	1,048,860	2,137,832
Quebec.....	452	146,067,130	11,141	12,666,586	44,064,907
Ontario.....	1,014	305,883,585	20,277	30,470,475	98,509,361
Manitoba.....	51	39,113,921	2,059	3,096,332	15,122,432
Saskatchewan.....	76	7,136,859	1,092	896,131	1,876,284
Alberta.....	401	141,629,189	10,579	11,357,722	23,021,495
British Columbia.....	276	127,009,722	11,297	16,345,887	31,925,780
Yukon.....	6	5,822,464	296	784,862	2,253,422
CANADA.....	2,397	842,060,020	72,809	91,969,299	238,169,809

\*Value added by smelting.

### Non-ferrous Smelting and Refining

In the past twenty years a marked expansion has taken place in facilities for the treating and refining of metals in Canada. A feature of this expansion has been the steadily increasing percentage of metals brought to the finished state in the country. Practically the entire Canadian output of such metals as lead, zinc, gold, silver, cobalt, selenium, bismuth, and cadmium, as well as the major part of the nickel and copper, is now metallurgically treated and refined here.

The magnitude of the non-ferrous metallurgical industry in Canada is indicated by the statistics of the 11 plants engaged in such operations showing \$176,000,000 invested capital, 8,000 employees receiving over \$13,000,000 in salaries and wages, over \$6,000,000 worth of fuel and electricity used, and smelter products valued at \$98,000,000 produced from \$48,000,000 worth of ores and concentrates.

In the province of Quebec, Noranda Mines, Ltd., operates a smelter in the Rouyn district, treating the copper-gold ores of the Horne mine and custom shipments. The current rate of production is about 30,000 tons of blister copper annually, which is shipped in the form of anodes to the plant of Canadian Copper Refiners, Ltd., a subsidiary of Noranda, situated in Montreal East. This plant, which has a capacity of about 75,000 tons of electrolytic copper annually, also treats blister copper from Flin Flon in Manitoba. Gold and silver are recovered from the slimes.

At Arvida, The Aluminum Company of Canada operates a huge metallurgical plant where imported aluminium oxide is utilized for the production of metallic aluminium by a thermo-electric process. This company also operates an electrolytic reduction works and fabricating plant at Shawinigan Falls.

In Ontario the International Nickel Company treats nickel-copper ores at two smelters, one located at Coniston and the other at Copper Cliff. Most of the resultant nickel-copper matte goes to the new Orford plant at Copper Cliff where the nickel and copper are separated, the remainder of the matte being shipped to Huntington, West Virginia, for the production of "Monel" metal. The copper is sent to the converters and the crude nickel sulphide is shipped to the company's refinery at Port Colborne, where refined and electrolytic nickel, nickel oxide, and residues of the platinum-metals group are produced. The Mond refinery at Clydach, Wales, producing refined nickel and copper sulphate, is supplied with washed nickel sulphide from Port Colborne. Residues from the nickel refineries containing metals of the platinum group are shipped to the refinery at Acton, England, for final treatment.

Blister copper from the converters is cast into anodes and sent to the plant of the Ontario Refining Company at Copper Cliff where it is refined and cast into wire bars, billets, ingots, cakes, or slabs. Blister copper from Sherritt Gordon (smelted at Flin Flon) and from Granby Consolidated at Anyox, B.C., has also been refined here. Gold, silver, metals of the platinum group, and selenium are the principal metals recovered from the slimes. This electrolytic copper refinery, which is the largest in the British Empire, has a capacity of 120,000 tons per year.

The Falconbridge Nickel Company operates a smelter in the Sudbury district, shipping the nickel-copper matte to its refinery at Kristiansand, Norway, for final treatment.

Cobalt-silver ores from the silver camps of northern Ontario, are largely treated at the customs smelter of the Deloro Smelting and Refining Company

at Deloro. Products obtained here include silver and cobalt metals, cobalt and nickel oxides and salts, white arsenic, and a silver-lead-bismuth bullion.

A refinery to recover radium from pitchblende ores of the Great Bear Lake area, Northwest Territories, has recently been completed and placed in operation at Port Hope, Ontario.

In northern Manitoba, at Flin Flon, the Hudson Bay Mining and Smelting Company operates a copper smelter and an electrolytic zinc refinery to treat the copper-zinc ores of the Flin Flon mine and any custom ores which may be available. Current annual production is at the rate of over 20,000 tons of blister copper and 20,000 tons of refined zinc.

In British Columbia the Consolidated Mining and Smelting Company operates, at Trail, smelter and refineries for the treatment of ores from its own mines and those of many customs shippers. The chief metallic products are refined bismuth, cadmium, copper, gold, lead, silver and zinc. The addition of a new slag fuming plant is effecting important economies in plant operation and is recovering 23 per cent of the zinc and 4 per cent of the lead in the ore which was formerly lost. Sulphuric acid made from flue gases is used in the production of fertilizer at a new plant recently completed on Warfield flats near Trail. The smelter of Granby Consolidated at Anyox, produces blister copper from the ores of the district.

### **The Iron and Steel Industry**

The smelting of iron ores in Canada is carried on by four companies:—Dominion Steel and Coal Corporation, Ltd., at Sydney, Nova Scotia (4 blast furnaces, 1,450 long tons daily capacity); Steel Co. of Canada, Ltd., Hamilton, Ontario (2 blast furnaces, 900 tons); Canadian Furnace Co., Ltd., at Port Colborne, Ontario (1 blast furnace, 350 tons); and Algoma Steel Corporation, Ltd., Sault Ste. Marie, Ontario (4 blast furnaces, 1,800 tons). The production of pig iron by these concerns in 1931 amounted to 420,000 long tons. Blast furnace charges included 745,000 long tons of iron ore, 225,000 short tons of limestone, and 450,000 short tons of coke. The bulk of the iron ore was imported from the Lake Superior region of United States and from the Wabana mines of Newfoundland, Canadian ores not being of sufficiently high grade to compete in price with the imported varieties. Only 70,000 tons of the limestone used and 115,000 tons of coke were of domestic origin.

The total consumption of pig iron in Canada amounted to 425,000 long tons in 1929. Steel production amounted to 635,000 tons of ingots and 35,000 tons of steel castings. Ferro-alloy production, including high grade ferro-manganese, several grades of ferro-silicon, and speigeleisen totalled 45,000 long tons.

### **Canada as a Factor in World Metal Markets**

Through the discovery and development of a wide range of metallic ores, Canada has in the past 10 years attained a substantial measure of world prominence in the production of many of the chief metals of commerce. Canada ranks first in the world production of nickel, second in gold, and fourth in lead, silver, copper, and zinc, according to 1931 figures of the American Bureau of Metal Statistics.

Furthermore, due to her relatively small domestic consumption, Canada must depend on foreign markets for the disposal of the larger part of her output of the important industrial metals and the tonnage involved in that "larger part"



is very much greater than a decade ago. Take the case of the base metals, copper, lead, and zinc. Ten years or so ago the total production of these three metals was hardly 100,000 tons per year. In 1931 it was about 400,000 tons, of which probably less than 100,000 tons were consumed in Canada, leaving at least 300,000 tons for export. Two other important industrial metals, nickel and aluminium, with respective outputs of 38,000 and 32,000 tons in 1931 and relatively small domestic consumption, are also dependent almost entirely on foreign markets.

The potential output of these and other metals is capable of material expansion when world markets offer a ready outlet. In fact it might be fairly said that very few countries are more vitally interested in world metal markets than Canada.

### Copper

Canada's yearly output of copper, which increased over 670 per cent in the period 1900-1930, has fallen off only 31,000 tons in 1932 from the all time high of 151,000 tons reached in 1930, a very creditable showing in the face of an extremely bad price and market situation.

Canada now exports about three-quarters of her output of copper. Prior to the imposition of a 4 per cent pound tariff in June, 1932, the bulk of these exports was sold in United States, but as the new tariff has effectively closed this market Canada has had to develop new ones. The most promising market, in view of the recent British Empire trade agreements appears to be Great Britain and considerable progress in that market has already been made. However, as other Empire countries such as Rhodesia and Australia also participate there, a sizable surplus of Canadian copper remains to be marketed in foreign countries. In this connection it is gratifying to note that Canada's copper trade with France, Netherlands, Germany, Belgium, and Norway has latterly been increasing.

Canadian ore reserves of copper are large and a considerable proportion of it can be produced at low cost. Jas. Y. Murdock, President of Noranda, recently stated that Canada could produce annually 194,000 short tons of copper at a cost of 5 cents or less, which is about  $\frac{1}{4}$  of the world output producible at that figure. Potential refinery capacity is considerably in excess of present production.

### Lead and Zinc

Over 85 per cent of Canada's lead and zinc output has for many years been mined in British Columbia, and the very large increases in the yield of these metals registered since 1920 may be mainly credited to the successful development of a process for economically treating the complex lead-zinc-silver ores of southern British Columbia.

The present output of lead is about 125,000 tons and that of zinc 85,000 tons, which, while considerably below the 1928-30 average of 166,000 tons of lead and 216,000 tons of zinc, yet reflects a remarkable ability to maintain large scale production under very low prices and curtailed markets. The combined domestic consumption of the two metals under present conditions probably does not exceed 40,000 tons, leaving 170,000 tons, or about 80 per cent, available for export, this practically all in the form of electrolytically refined metal. The principal export markets for Canadian lead and zinc are United Kingdom and Japan, such countries as France, Belgium, China, British India, and the Netherlands purchasing in smaller quantities.

Adequate reserves of lead and zinc are available to permit a greatly enhanced production when markets become available.

#### Nickel

The Canadian production of nickel has been more affected by the depression than any of the other important industrial metals, the 1932 output being little more than one-quarter of the peak 1929 output of 55,000 tons. Unflagging research activity resulting in the discovery of important new uses each year, principally in the field of alloys, will undoubtedly prove an important factor in quickly restoring nickel output to normal levels when times improve.

The developed ore reserves of the Sudbury district in Ontario are capable of supplying world requirements of nickel for many years. As the domestic consumption is small the limits of the output are defined by the extent of foreign demand.

#### Aluminium

Although no commercial ores of aluminium are found in Canada the industry has already assumed important proportions, due almost entirely to the availability of a cheap and plentiful supply of hydro-electric power. The production of ingot aluminium from imported ores has risen from about 9,000 tons in 1921 to 46,000 tons in 1929, the 1931 output being 32,000 tons. Canada ranks next to the United States and Germany in world output. The magnitude of the works at Arvida and the great chain of hydro-electric installations along the Saguenay river point to still greater participation of Canadian aluminium in export markets.

#### Gold

Of recent years Canada has been an increasingly important contributor to world stocks of gold. The 1932 (preliminary) production exceeded \$63,000,000, constituting a new high record. With the producing fields as a whole steadily increasing their yields, several new fields now being tested, and large amounts of gold produced each year in copper, nickel and other base metal operations, there is every reason to believe that Canada's output of gold will continue to show important advances.

#### Other Metals

At the price prevailing for the past two or three years very few mining companies producing silver as a primary metal have been able to operate, the greater part of Canada's output being obtained from other metallic ores—copper, nickel, gold, lead, zinc—in which silver is a by-product. Present production is at the rate of about 18,000,000 ounces annually, mainly exported.

Practically all the platinum metals—platinum, palladium, rhodium, iridium, etc. produced in Canada are recovered from the nickel-copper ores of the Sudbury district and their output is governed rather by the production of nickel than by price considerations. The present combined output amounts to about 90,000 ounces of which 44,000 ounces is platinum. The output of cobalt—500,000 lbs. in 1932—is considerably restricted by the small output of silver ores from Northern Ontario. Appreciable quantities of bismuth and cadmium are now available for export from Canadian ores and selenium and radium have recently been added to the list.

### The Administration of Mineral Lands

The Dominion Government administers the lands and minerals in the Northwest Territories and Yukon Territory, and the following is a list of the principal mining laws and regulations relating to those Territories:—

Yukon Placer Mining Act,	Oil and Gas Regulations,
Yukon Quartz Mining Act,	Petroleum and Natural
Quartz Mining Regulations,	Gas Regulations,
Placer Mining Regulations,	Quarrying Regulations.
Coal Mining Regulations,	

Copies of any mining regulations which relate to lands under federal Government jurisdiction may be obtained on application to Dominion Lands Administration, Department, of the Interior, Ottawa.

The production of minerals is an important industry in all the provinces of the Dominion of Canada, with the exception of Prince Edward Island, and each province enacts laws and regulations governing the disposal of mining rights and the operations of mines. For information respecting provincial mining laws, application should be made to the respective provincial departments listed on page 110.

### Governmental Facilities for Dealing with Mining, Metallurgical, and Geological Problems

With the rapid advancement of mining in Canada, there has grown, particularly in the last decade, a recognition of the value of organized scientific research in solving the many and varied problems which confront the growing industry. In the solution of such problems, the Department of Mines at Ottawa, has, since its inception in 1907, taken a leading part. The provincial governments, both in their own laboratories and in collaborating universities and associated research organizations, have also contributed in no small measure to the success attained.

#### Federal Organizations

The Federal Department of Mines is chiefly concerned with the various scientific and technical phases of mining, milling, and metallurgical operations, and with delimiting, mapping, and directing attention to the mineralized areas of Canada, in assisting the mine operator and metallurgist, in solving the problems continually arising in the business of finding, extracting, milling, and smelting ores, and, through technological research, in the study of methods by means of which the product of the mine may be more efficiently utilized and the market for Canadian mineral products extended.

The divisions of the Department of Mines are:—

Geological Survey—geological, palaeontological, mineralogical, topographical, and borings divisions—branch office, Vancouver, B.C.

Mines Branch—fuels and fuel testing, ore dressing and metallurgical, ceramic and road materials, and chemical divisions, each with fully equipped laboratories; also division of mineral resources.

Explosives Division—inspection service.

### Provincial Organizations

The following provincial departments administer affairs concerning mining and sponsor relevant research:—

Nova Scotia—Department of Public Works and Mines, Halifax.

New Brunswick—Department of Lands and Mines, Fredericton—geologist—diamond drill for loan.

Quebec—Department of Roads and Mines, Quebec—staff of geologists.

Ontario—Department of Mines, Toronto—staff of geologists—chemical and assay laboratories at Toronto—assay office at Cobalt.

Manitoba—Department of Mines and Natural Resources, Winnipeg.

Saskatchewan—Department of Railways, Labour and Industries, Regina—geologist.

Alberta—Department of Lands and Mines, Edmonton.

British Columbia—Department of Mines, Victoria—mineralogist.

### (3) FUEL RESOURCES OF CANADA

The important fuel resources of Canada from an industrial viewpoint are coal, natural gas, and petroleum.

#### Coal

Canada is estimated to contain about one-sixth of the coal resources of the world. A considerable portion of this enormous tonnage cannot be mined under present conditions but it is evident that there is an abundance of coal in the country, sufficient for many centuries of intense industrial effort.

These resources, considered from a geographical viewpoint, are in the eastern and western portions of Canada. Nova Scotia has large reserves, New Brunswick a much smaller supply, while Prince Edward Island and Quebec so far as known have none. Ontario has some millions of tons of lignite in the Onakawana field, south of James bay. Manitoba has little coal while Saskatchewan has large reserves of lignite. Alberta possesses the greater part of the coal of the Dominion and British Columbia has large reserves of both low and high rank coal. There are also coal fields in the Northwest Territories, Yukon, and the Arctic Islands.

In 1931 the production of coal for the Dominion amounted to 12,230,616 short tons.

#### Nova Scotia

The production of coal, owing to industrial retrenchment in Upper Canada, declined in 1931 to 4,955,563 tons as compared with the 1930 output of 6,252,552 tons. This was mined in the four coal fields of the province as follows: Sydney field, 3,449,472 tons; Cumberland field, 694,097 tons; Pictou field, 671,489 tons; and the Inverness field, 140,505 tons.

The coals of Nova Scotia are bituminous, with high calorific value, low moisture and ash content. They possess coking properties and are suitable for all general purposes, viz., steam raising, metallurgical by-product coking, and gas producing.

#### New Brunswick

The coal output in 1931 was 182,181 tons, representing a decline of 13 per cent from the production of the preceding year.



The main source of supply is the Minto field, located near the head of Grand Lake.

Minto coal is an average bituminous coal, low in moisture, fairly high in calorific value, and possessing good coking properties. From the point of view of handling, friability, and the extent of fines, it is inferior to the better grades of Nova Scotia coals. The screened lump product, however, makes a good steam coal.

#### Ontario

The existence of lignite in the Onakawana area south of James bay has been known for many years but only recently has any proper conception of its extent been obtained. The work of the Ontario Department of Mines in the last two years has disclosed a basin of considerable size, estimated at over 150 million tons. The coal compares favourably with Saskatchewan lignite. Owing to its high moisture content, however, it will not be practicable to ship it any great distance in the raw state.

#### Manitoba

Manitoba became a coal producing province in a small way during 1931 when 1,306 tons of coal were mined from the lignite seams in the Turtle Mountains near Deloraine. This coal is a high moisture lignite.

#### Saskatchewan

The output from Saskatchewan coal mines in 1931 was 662,836 tons, being not only a 14.4 per cent increase over the previous year, but a new high record for the province. Continued development in stripping and open-cut methods was responsible to a large extent for the increased output.

Over 95 per cent of the production comes from the Estevan area in the southeast corner of the province.

These low grade lignites are used locally for industrial and domestic purposes, and are finding an increasing market in Manitoba. Carbonized lignite briquettes, which are made near Bienfait, are marketed locally and in Manitoba.

#### Alberta

It is estimated that Alberta contains about 87 per cent of all the coal in Canada. In 1931 the production amounted to 4,564,015 tons representing about 60 per cent of the total possible output from the mines capable of operation.

Approximately 82 per cent of the production came from six districts: in order of output these were: Drumheller, Crowsnest, Mountain Park, Coalspur, Edmonton, and Lethbridge. Crowsnest and Mountain Park coals are ranked as bituminous; Coalspur coal as sub-bituminous; and Drumheller, Edmonton and Lethbridge coals as lignite.

The production of coal by kinds in 1931 was as follows: bituminous 1,846,306 tons, sub-bituminous 471,343 tons, and lignite 2,246,366 tons.

#### British Columbia

The coal production of the province in 1931 amounted to 1,876,406 tons, which represented a decline to the lowest point on record since 1904. This drop was caused to a large extent by the increased use of imported crude petroleum.

The chief coal-mining centres, in order of their importance, were: Nanaimo, and Comox, on Vancouver Island; Crowsnest Pass district, in the southeast corner of the province; and Nicola-Princeton area, in the southern interior. There are numerous undeveloped coal areas throughout the province, the most

important being the Peace River field located just west of the Alberta boundary, the Groundhog area on the Skeena north of Hazelton, the Telkwa Valley—partially developed—in the northern part of the province, and those of Queen Charlotte Islands.

The coal mined in British Columbia ranks as bituminous, sub-bituminous, and lignite. Anthracite occurs in small amounts on Graham Island, and in the Groundhog area. The bituminous coals are suitable for household purposes, steam plants, and the manufacture of coke.

#### Industrial Coal Situation in Canada

Canada, possessing 17 per cent of the coal resources of the world, has an abundance of coal for industrial purposes, sufficient for many centuries of intensive exploitation. These coal areas, however, are located in the eastern and western sections of the Dominion, whereas the most populous and highly industrialized section—the Great Lakes-St. Lawrence zone—is barren of high grade coal, thus necessitating the importation of approximately 50 per cent of the country's requirements of coal from other countries.

The industrial market of the Maritimes—Nova Scotia, New Brunswick and Prince Edward Island—is being supplied by local coal and coke, whereas the manufacturing areas of Quebec are supplied with coal principally from Nova Scotia, the United States, and Great Britain.

The highly industrialized section of Ontario including such large consuming centres as Toronto and Hamilton is coalless. There are lignite deposits in Northern Ontario, but the southern area can be more easily and economically supplied with coal from the nearer coal fields of Pennsylvania and West Virginia.

The major portion of the coal requirements of Manitoba comes from Alberta and Saskatchewan, especially the former province, while the remainder is supplied by American coals shipped in via the Great Lakes. In the Winnipeg area cheap hydro-electric energy is a heavy competitor for power purposes.

The industrial requirements of the western provinces—Saskatchewan, Alberta and British Columbia—are supplied by coal mined in these provinces. The collieries of British Columbia in recent years have suffered as a result of the competition from fuel oil and hydro-electric development.

A small percentage of Canada's coal production is converted each year into coke in order to supply certain industries with their fuel requirements. In 1931 over a million and one-half tons of metallurgical coke were made in Canada from foreign and local coals. Coke oven plants are located at Sydney and Halifax, Nova Scotia; at Montreal and Quebec City, Quebec; at Hamilton and Sault Ste. Marie, Ontario; at Winnipeg, Manitoba; and at Fernie and Anyox, British Columbia.

#### Tariff

Under the existing tariff (Jan., 1933) the import duties on coal are:—

	British Preferential Tariff	Inter- mediate Tariff	General Tariff
Coal, anthracite, n.o.p. .... per ton	Free	50c.	50c.
Coal, n.o.p., including screenings and coal dust of all kinds. .... per ton	35c.	75c.	75c.
Coal, lignite. .... per ton	Free	Free	Free
Coke, n.o.p. .... per ton	Free	\$1.00	\$1.00
Coke of a kind not produced in Canada or coke which, owing to transportation costs, is not available commercially in Canada, when imported by manufacturers for use exclusively in furnaces in manufacturing calcium carbide or in metallurgical operations, in their own plants. .	Free	Free	Free

There is a drawback of ninety-nine per cent on bituminous coal entering Canada when used for the following:—

1. For use in by-product recovery coke ovens.
2. For the production of coke for use in the smelting of metals from ores and in the smelting of metals.
3. When pulverized by proprietors of rolling mills for heating iron or steel for use only in the production of rolled iron or steel at their rolling mills.

These drawbacks are subject to exceptions in certain instances and more specific information can be secured from the Department of National Revenue, Ottawa.

### Natural Gas

The commercial production of natural gas, which is confined to the provinces of Alberta, Ontario, and New Brunswick, amounted to about 26,500 million cubic feet in 1931.

#### Alberta

The province of Alberta has the largest production, amounting to about 70 per cent of the total in 1931, as well as the greatest potential supply in Canada. Owing to the great activity in drilling for oil during the past decade particularly in the Turner Valley, large flows of natural gas have been opened up, presenting the problem of economic utilization and conservation. One of the conservation schemes under way at present is the representing of the old Bow Island field with excess gas from the Turner Valley. At the end of 1931 this had amounted to about  $2\frac{1}{4}$  billion cubic feet of gas.

The most productive area in the province is the Turner Valley, where wet gas is stripped of its naphtha content, scrubbed, and piped to Calgary, Lethbridge and intermediate points. Other important producing areas are: the Viking field which supplies Edmonton and district; and the Medicine Hat field, the oldest in the province, which continues to supply the industrial and domestic requirements of Medicine Hat, Redcliff and the surrounding area.

The old Bow Island field being repressured at present with the excess gas from Turner Valley will act, together with the adjacent Foremost field, as reserves. A small field at Brooks supplies that town, while on the border between Alberta and Montana, there is a large potential producer. Flows of gas have been developed in other areas throughout the province, but have not as yet been utilized commercially.

#### Ontario

The production of natural gas in Ontario amounted to 7,400 million cubic feet in 1931. This output came chiefly from the gas fields located in Essex, Kent, Norfolk, Haldimand, Lambton, and Welland counties. A new field which has been developed recently is situated in Tuscarora township, Brant county.

Considerable expansion and development of the gas fields of the province has taken place during the last two years. New wells were brought into production in a number of the older fields, additional pipe lines were laid, old lines replaced or enlarged, while the two largest producers and distributors—Union Natural Gas Company and the Dominion Natural Gas Company—have taken steps to obtain a supply of artificial gas which will be mixed with the natural supply, thus extending the present supply for many years. These companies supply the domestic, and to a certain extent the industrial, requirements of the southern part of the province, from the Windsor-Sarnia area in the west to Hamilton in the east.

### **New Brunswick**

The New Brunswick production of natural gas, which in 1931 amounted to about 653 million cubic feet, came from wells in the Stony Creek field, nine miles southeast of Moncton. This field has supplied the city of Moncton and the town of Hillsborough with natural gas since 1912. The output has remained practically constant from year to year, new wells being drilled or the old ones deepened as the supply diminishes in the upper sands.

### **Petroleum**

For years Canada has been actively seeking for and testing likely petroliferous formations and the results of the efforts have been to a certain degree encouraging. That there are large areas, especially in western Canada where the geological structures are favourable for the accumulation of oil, is admitted, but, to date, the oil production in comparison has been limited. It is believed, however, that in selected areas outlined by careful and detailed geological work, the search for oil will eventually lead to reasonable rewards. Canada's crude oil production, amounting to 1,537,000 barrels of 35 imperial gallons) in 1931, was obtained from Alberta, Ontario, and New Brunswick.

### **Alberta**

Alberta's contribution to the petroleum output of Canada began in 1913-14 when a number of wells were drilled in Turner Valley. The production, however, was small until 1924, when the big Royalite No. 4 came into production. In 1931 the province produced about 92 per cent of the total production of the Dominion.

The most important producing area is the Turner Valley, 35 miles southwest of Calgary. In 1931 this field produced 1,345,689 barrels of naphtha and 26,936 barrels of light crude oil. Other producing areas were Red Coulee, contributing 65,055 barrels of light crude, and the Wainwright-Ribstone field, 17,504 barrels of heavy crude oil.

Drilling activity, especially in the Turner Valley field, fell off considerably in 1931. This was largely on account of general business depression, unsatisfactory conditions prevailing in the oil industry generally, and the Alberta Government's natural gas conservation measures.

### **Ontario**

The first oil well drilled on the North American continent was in the southwestern peninsula of the province in 1858. For many years this was the chief oil-producing centre in Canada. In 1925, however, it was exceeded by the Turner Valley oil field.

The main oil fields in the area are located at Petrolia, Oil Springs, and Bothwell, in Lambton and Kent counties. The production of oil in the province has shown an annual decrease since 1907, dropping to 117,302 barrels in 1930. The output in 1931, amounting to 122,365 barrels, showed a slight increase.

### **New Brunswick**

The oil producing area in New Brunswick is confined to a tract of about 8 square miles in Albert county—Stony Creek oil and gas field. The present output is small, amounting to only 6,577 barrels in 1931.



### Northwest Territories

While searching for oil in 1921 several wells were drilled along the Mackenzie river about 50 miles north of Norman. Oil was obtained, but, owing to the distance of the field at that time from available markets, drilling operations ceased. In view of recent activities in the Great Bear lake area, the field has been reopened and a small refinery installed to handle 30 barrels of oil daily. During the summer 1932, 20,000 gallons of fuel oil were supplied for mining operations, also 10,000 gallons of gasoline.

### Refineries

Canadian refineries, situated at strategic points across the Dominion for convenience in marketing products, treated over a billion gallons of crude oil in 1931, only 4.6 per cent of which came from Canadian wells. The imported oils were obtained chiefly from the United States and South America.

In 1931 these petroleum refineries were located as follows:—6 in Alberta, 4 in Ontario, 3 in Quebec, 2 in British Columbia, and one in each of the provinces of Nova Scotia, New Brunswick, Manitoba, and Saskatchewan.

### Bituminous Sands

In the McMurray area, some 300 miles to the north of the city of Edmonton, Alberta, occurs an extensive deposit of bituminous sand. This deposit may be regarded as a potentially valuable source of supply of bitumen, crude petroleum, and certain petroleum derivatives—notably fuel oil. Up to the present, activity has been mainly directed toward field exploration, demonstration work, and laboratory studies. In 1931, however, 6,700 gallons of separated bitumen were produced.

## (4) WATER POWER RESOURCES OF CANADA—DEVELOPED AND UNDEVELOPED

Canada is so richly endowed with water power that practically every large industrial centre in the Dominion is now served with hydro-electric energy and has within easy transmission distance ample reserves, the development of which will provide adequate power for many years to come.

So abundant and widely distributed are Canada's water powers (see map facing page 116) that the present installation of 7,045,260 h.p. represents only a little more than sixteen per cent of the possible development. Canada is second only to the United States in total turbine installation and second only to Norway in turbine horsepower per capita.

So general is the use of waterpower in Canada that it furnishes almost 79 per cent of the motive power in industry, while in the provinces of Ontario and Quebec, which have no indigenous coal supplies, more than 83 per cent of the industrial power is hydraulic in origin.

In the central electric station industry, which includes nearly 87 per cent of the water power development, more than 95 per cent of the main plant equipment is operated by water power and this equipment generates more than 98 per cent of the total electrical output.

### Developed Water Power

Canada's hydraulic development has increased from 170,000 h.p. in 1900 to 7,045,260 h.p. at the beginning of 1933. In the last five year period, 1928-1932, installations totalling more than 2,216,348 h.p. were brought into operation. Although no new developments of any considerable size were initiated during 1932, construction is continuing upon several large undertakings which will add materially to Canada's total installation during 1933 and subsequent years.

The table below lists the available and developed water power by provinces and analyses the distribution of developed water power among central electric stations, pulp and paper mills, and other industries.

#### POTENTIAL AND DEVELOPED HYDRO-ELECTRIC POWER IN CANADA

(JANUARY 1, 1933—IN HORSEPOWER)

Province	Available 24-hour power at 80% efficiency at ordinary six months flow	Turbine installations			Total
		In central electric stations	In pulp and paper mills	In other industries	
British Columbia.....	5,103,500	547,160	105,800	60,832	713,792
Alberta.....	1,049,500	70,320	—	1,277	71,597
Saskatchewan.....	1,082,000	42,000	—	35	42,035
Manitoba.....	5,344,500	390,925	—	—	390,925
Ontario.....	6,940,000	1,872,823	240,880	94,402	2,208,105
Quebec.....	13,064,000	2,998,875	222,160	136,285	3,357,320
New Brunswick.....	169,100	104,960	19,778	8,943	133,681
Nova Scotia.....	128,300	84,202	12,378	15,587	112,167
Prince Edward Island.....	5,300	376	—	2,063	2,439
Yukon and North West Territories.....	731,000	—	—	13,199	13,199
Canada.....	33,617,200	6,111,641	600,996	332,623	7,045,260

NOTE.—The entire electrical output of central electric stations is sold.

By far the greater part of it is sold to the pulp and paper, mining, and other industries and the part so sold greatly exceeds the power generated by these industries for their own use.

### Water Power in Central Electric Stations

Canada's central electric station industry has an installation of 6,111,641 h.p., or nearly 87 per cent of the total hydraulic installation of the country. It has attained its present pre-eminent position because the wide distribution and accessibility of Canada's abundant water powers are such that, with modern methods of transmission, electricity for industrial, agricultural, and domestic use is available to all except a very small proportion of her population. The certainty of the supply of power and the assurance of its continuance at reasonable rates have done much to attract industries which would not ordinarily engage in the production of their own power.

More than 62 per cent of the power used in the general manufacturing industry in Canada is purchased from central electric stations, while in a number of industries it amounts to 100 per cent. Of the nine basic groups into which Canadian industry is classified for census purposes, it is interesting to note that the industries in every group purchase more power from central stations than they develop themselves, the percentage of power purchased by the various groups varying from a maximum of 86 per cent to a minimum of 54 per cent of the total power employed.







### Hydro-Electric Power in the Pulp and Paper Industry

More power is consumed by this industry than by any other individual industry in Canada, and 90 per cent of it is in the form of hydro power. The total hydraulic installation in the pulp and paper mills now amounts to 600,996 h.p., in addition to which there is 1,007,000 h.p. represented in motor equipment driven by electricity purchased from central electric stations. Furthermore, appreciable quantities of off-peak and surplus hydro-electricity are also purchased for the generation of steam in electric boilers.

### Hydro-Electric Power in Other Industries

Of the 332,623 h.p. installed in other than the central electric station and pulp and paper industries, the mineral industry has the largest installation amounting to over 110,000 h.p., and in addition purchases electricity from central electric stations to operate a motor installation of more than 600,000 h.p. The electro-chemical industry also utilizes large amounts of hydro-electricity, while hundreds of saw, grist, and grinding mills are operated directly by water power.

### Sources and Character of Power for Industrial Areas of Canada

On the map facing page 120, the various industrial centres and districts in Canada served by hydro-electricity are indicated by numbered hatching, the numbers on the map corresponding to those in the list below. The districts served by fuel plants are indicated by series of dots. A glance at the map carries conviction as to the pre-eminence of water power in Canadian industry.

### Developed Water Powers in Canada

#### Developments Serving Industrial Areas Indicated on Map Facing Page 120

No.	Plant or System	Owner	Installation h.p.
1	Anyox plant.....	Granby Consolidated Mining, Smelting & Power Co., Ltd.....	13,400
2	Woodworth Lake plant.....	Northern British Columbia Power Co.	1,650
	Falls River plant.....	" "	5,900
3	Ocean Falls plants.....	Pacific Mills Ltd.....	26,850
4	Millstone River plant.....	Nanaimo Electric Light, Power & Heating Co., Ltd.....	450
	Coal Creek plant.....	" "	150
	Puntledge River plant.....	Canadian Collieries Ltd.....	12,000
5	Shushwap Falls plant.....	West-Canadian Hydro-Electric Corp.	3,800
6	Barrière river.....	British Columbia Power Corp., Ltd.	2,000
7	Goldstream plant.....	" "	3,400
	Jordan River plants.....	" "	45,000
8	Coquitlam-Buntzen plants.....	" "	84,000
	Stave Falls plant.....	" "	77,500
	Alouette plant.....	" "	12,500
	Ruskin plant.....	" "	47,000
9	Powell River plant.....	Powell River Co., Ltd.....	49,860
	Lois River plant.....	" "	24,800
10	South Slocan plant.....	West Kootenay Power & Light Co., Ltd.....	75,000

## Developed Water Powers in Canada—Continued

Developments Serving Industrial Areas Indicated on Map  
Facing Page 120

No.	Plant or System	Owner	Installation
			h.p.
10	Corra Linn plant.....	West Kootenay Power & Light Co., Ltd.....	57,000
	Bonnington Falls plants.....	“ “.....	94,000
	“ plant.....	Municipality of Nelson.....	6,570
11	Bull River plant.....	East Kootenay Power Co., Ltd.....	7,200
	Elk River plant.....	“ “.....	15,000
12	Kananaskis Falls plant.....	Calgary Power Co.....	11,600
	Horseshoe Falls plant.....	“ “.....	20,000
	Ghost Falls plant.....	“ “.....	36,000
	Eau Claire plant.....	“ “.....	780
13	Island Falls plant.....	Churchill River Power Co.....	42,000
14	Pont du Bois plant.....	Municipality of Winnipeg.....	105,000
	Slave Falls plant.....	“ “.....	24,000
	Emnema plant.....	Winnipeg Electric Co., Ltd.....	37,800
	Great Falls plant.....	“ “.....	168,000
	Seven Sisters plant.....	Northwestern Power Co.....	55,000
15	Kenero plants.....	Keewatin Power Co., Ltd.....	30,875
16	Eat Falls plant.....	Hydro-Electric Power Commission of Ontario.....	5,000
17	Fort Frances, Moose and Calm Lakes, and Sturgeon Falls plants.....	Ontario & Minnesota Power Co., Ltd....	51,850
18	Kakabeka Falls plant.....	Kaministiquia Power Co., Ltd.....	35,000
19	Nipigon plant.....	Hydro-Electric Power Commission of Ontario.....	75,000
	Alexander Landing plant.....	“ “.....	54,000
20	St. Marie plant.....	The Great Lakes Power Co., Ltd....	29,200
	High Falls plant.....	“ “.....	22,000
21	Smoky Falls plant.....	Spruce Falls Power & Paper Co., Ltd.....	56,250
22	Wawa Falls plant.....	Canada Northern Power Corp., Ltd.....	14,900
	Sandy Falls plant.....	“ “.....	4,900
	Sturgeon Falls plant.....	“ “.....	8,000
	Indian Chutes plant.....	“ “.....	4,000
23	Iroquois, Twin, and Island Falls plants.....	Abitibi Power & Paper Co., Ltd.....	106,000
24	Hound Chute plant.....	Canada Northern Power Corp., Ltd....	5,340
	Fountain Falls plant.....	“ “.....	3,000
	Matabitchuan plant.....	“ “.....	13,200
	Upper Notch plant.....	“ “.....	13,000
	Ka-Ka-Ke Falls plant.....	“ “.....	40,000
25	McVittie.....	Hydro-Electric Power Commission of Ontario.....	3,600
	Coniston.....	“ “.....	6,300
	Stinson.....	“ “.....	7,000
	Espanola plant.....	Abitibi Power & Paper Co., Ltd....	20,800
26	High Falls and Big Eddy plants.....	International Nickel Co. of Canada, Ltd.....	50,400
27	South River plants.....	Hydro-Electric Power Commission of Ontario.....	5,700
28	Sturgeon and Smoky Falls plants.....	Abitibi Power & Paper Co., Ltd.....	23,790
29	Swift Rapids plant.....	Municipality of Orillia.....	6,360
	Big Chute plant.....	Hydro-Electric Power Commission of Ontario.....	6,200
	Wasdells Falls plant.....	“ “.....	1,200
29	South Falls plant.....	“ “.....	5,400
	Tretheway Falls plant.....	“ “.....	2,200

## Developed Water Powers in Canada—Continued

Developments Serving Industrial Areas Indicated on Map  
Facing Page 120

No.	Plant or System	Owner	Installation h.p.
29	Hanna Chute plant.....	Hydro-Electric Power Commission of Ontario.....	1,550
30	Eugenia Falls plant.....	" ".....	8,500
31	Central Ontario System plants.....	" ".....	57,980
	Peterborough plant.....	Peterborough Hydraulic Power Co., Ltd.....	6,000
	Campbellford plant.....	Municipality of Campbellford.....	3,370
32	Niagara Falls plant.....	Canadian Niagara Power Co., Ltd....	121,000
	De Cew Falls plant.....	Hydro-Electric Power Commission of Ontario.....	45,000
	Niagara Falls plants.....	" ".....	874,700
33	Waltham plant.....	Pembroke Electric Light Co., Ltd....	3,600
	Bryson plant.....	Gatineau Power Co.....	51,400
34	Bonnechère River plants.....	Municipality of Renfrew.....	1,700
	Calabogie plant.....	Hydro-Electric Power Commission of Ontario.....	6,000
	Galetta plant.....	" ".....	1,400
	Chats Falls.....	Ottawa Valley Power Co.....	224,000
35	High Falls and Carleton Place plants.....	Hydro-Electric Power Commission of Ontario.....	4,450
36	Paugan plant.....	Gatineau Power Co.....	238,000
	Chelsea plant.....	" ".....	136,000
	Farmers plant.....	" ".....	96,000
37	Chaudière plants.....	Gatineau Power Co.....	36,600
	" ".....	Ottawa Electric Co.....	19,760
38	High Falls plant.....	MacLaren-Quebec Power Co.....	90,000
39	Beauharnois plant.....	Beauharnois Light, Heat & Power Co	200,000
	Cedars Rapids plant.....	Montreal Light, Heat and Power Cons.	197,400
	Soulanges plant.....	" ".....	16,050
	St. Timothée plant.....	Canadian Light & Power Co.....	30,400
40	Chambly plant.....	Montreal Light, Heat & Power Cons..	21,600
	Lachine plant.....	" ".....	15,800
41	Des Prairies River plant.....	Montreal Island Power Co.....	45,000
42	St. François and Magog River plants..	Municipality of Sherbrooke.....	17,050
	Sherbrooke plant.....	Southern Canadian Power Co., Ltd...	4,050
43	Drummondville plant.....	" ".....	19,500
	Hemmings Falls plant.....	" ".....	33,600
44	Shawinigan Falls plant.....	Shawinigan Water & Power Co.....	278,500
	Grand Mère plant.....	" ".....	188,500
	La Gabelle plant.....	" ".....	152,000
	St. Narcisse plant.....	North Shore Power Co.....	22,200
	St. Alban plant.....	Portneuf Power Co.....	4,000
45	St. Gabriel plant.....	Quebec Power Co., Ltd.....	2,200
	Montmorency River plants.....	" ".....	7,850
46	Chaudière River plant.....	" ".....	4,800
	St. Féréol plant.....	" ".....	24,000
47	St. Raphaël and Armagh plants.....	" ".....	4,900
48	Métis River plant.....	Lower St. Lawrence Power Co., Ltd..	9,700
49	Isle Maligne plant.....	Duke-Price Power Co.....	495,000
	Rivière à Mars plant.....	Municipality of Bagotville.....	1,350
	Garneau Falls plant.....	Saguenay Electric Co.....	3,500
	Chicoutimi River plant.....	Quebec Pulp & Paper Corp.....	7,200
	Shipshaw, Chicoutimi River, and Au Sable river plants.....	Price Bros. & Co., Ltd.....	70,100

## Developed Water Powers in Canada—Concluded

Developments Serving Industrial Areas Indicated on Map  
Facing Page 120

No.	Plant or System	Owner	Installation
			h.p.
49	Ha Ha River plants.....	Port Alfred Pulp & Paper Corp.....	2,100
	Chute à Caron plant.....	Alcoa Power Co.....	260,000
50	Grand Falls plant.....	Bathurst Co., Ltd.....	14,000
51	Aroostook Falls plant.....	Maine & New Brunswick Electric Power Co., Ltd.....	11,400
	Grand Falls plant.....	St. John River Power Co.....	80,000
52	Musquash plant.....	New Brunswick Electric Power Commission.....	11,100
53	St. Margaret Bay plants.....	Nova Scotia Power Commission.....	15,820
54	East River-Sheet Harbour plants....	" ".....	11,840
	" " River plants.....	" ".....	32,400
	" " Sheet plant.....	" ".....	3,000
Total for stations listed.....			6,220,595
Total power installation in Canada.....			7,045,260

## Current Development

The large undertakings now in progress include the 130,000 h.p. development on the Lièvre river at Masson and the 240,000 h.p. installation on the St. Maurice river at Rapide Blanc. Construction proceeded at the 330,000 h.p. Canyon plant on the Abitibi river until July, 1932, when financial difficulties necessitated its discontinuance.

The Hydro-Electric Power Commission of Ontario acquired ownership of this development by the purchase as of March 31, 1933, of the assets of the Ontario Power Service Corporation.

## Undeveloped Water Power

Canada's present recorded water power resources are capable of a possible installation of 43,700,000 h.p. but to date only a little more than 16 per cent of this is developed. Much of this great reserve of power is located reasonably close to existing industrial centres, while the more remote water power sites offer opportunities for the development of special industries which require large amounts of low cost power.

Quebec has the largest reserves of undeveloped power of any of the provinces, and although much of this can not be economically developed at present, the St. Lawrence river with its tributaries—the Ottawa, St. Maurice, and Saguenay—which flow through the industrial part of the province, still have large quantities of undeveloped energy.

In Ontario the principal undeveloped water powers are situated on the international reach of the St. Lawrence river—the future development of which has recently been made the subject of International Treaty—on the interprovincial reach of the Ottawa river, and on the great streams draining northwards to Hudson Bay.







Manitoba's largest undeveloped water powers occur on the Nelson, Churchill, and Winnipeg rivers, those on the Nelson river alone approaching four million horse power.

Great reserves of power are available in British Columbia. Many of the outstanding power streams are still completely undeveloped. The Skeena, Nass, Bulkley, Fraser, and Columbia rivers with their tributaries have potentialities estimated in the millions of horse power.

Both Alberta and Saskatchewan have power resources capable of yielding more than one million horse power, the Bow, Elbow, and Red Deer rivers in the south and the Athabaska, Peace, and Slave rivers in the north being the outstanding power rivers of Alberta, while in Saskatchewan the major powers occur on the Churchill, Reindeer, and Saskatchewan.

In the Maritime provinces a large number of small sites are still available for development.

### Administration of Water Power

On account of the importance of water-power development as a factor in national welfare, the administration of those water-powers which form part of the public domain has received careful attention on the part of legislative bodies throughout Canada. In general it may be said that the right to develop a water-power of commercial value can be acquired only in the form of a lease or licence for a definite term of years, subject in some cases to renewal, with or without compensation when the term expires. There are some exceptions to this rule; in Prince Edward Island where the power sites are of small extent and all in private ownership, they may be acquired outright by purchase of the riparian land, and in New Brunswick, Quebec and Ontario also small sites may similarly be acquired by purchase; but in Quebec it is in all cases desirable it not essential, to obtain a confirmatory grant from the provincial Government and in Ontario all works in water require the approval of the Government authorities while in New Brunswick,<sup>a</sup> dams require a corresponding approval.

The term of a water-power licence varies according to the conditions attaching to the particular site and the practice of the province in which it is situated. In Nova Scotia it is from 10 to 50 years and the original grantee is given the preference in any renewal which is permitted. In Quebec, from 20 to 99 years, 75 being the most usual term. Generally there is no right of renewal and no provision for compensation at the end of the term. In Ontario, 20 years with a right to two further terms of 10 years each, compensation being determined by the Government and approved by the Legislative Assembly. In Manitoba, Saskatchewan, and Alberta the maximum term is 50 years, subject to renewal under the regulations in force at that time. The development may be taken over by the Crown at any time after 30 years of the licence term has expired; and in all cases when the licence expires or is terminated, compensation suitable to the conditions is provided. In British Columbia the maximum term is also 50 years without provision for renewal or compensation.

There are some further requirements controlling hydro-electric development. All proposed works in navigable waters, which may affect navigation, require the prior approval of the federal Government. As lumbering is carried on along many of the larger rivers, power development must be conducted without undue interference with floating rights, and in general it may be said that the construction, operation, and maintenance of all such projects is in Canada subject to governmental approval and supervision. In each province there is a Public

Utility Commission for the regulation of rates and services and with general control of the operations of hydro-electric undertakings in the public utility field.

Applications for water-power rights or for information as to conditions of acquiring and using such rights should be addressed to the following administrative officers of the Dominion and provincial Governments:—

The Yukon and Northwest Territories—The Director of Water Power, Department of the Interior, Ottawa, Ont.

Province of British Columbia—The Comptroller of Water Rights, Department of Lands, Victoria, B.C.

Province of Alberta—The Acting Deputy Minister, Department of Railways and Telephones, Edmonton, Alberta.

Province of Saskatchewan—The Deputy Minister, Department of Natural Resources, Regina, Sask.

Province of Manitoba—The Deputy Minister, Department of Mines and Natural Resources, Winnipeg, Man.

Province of Ontario—The Deputy Minister of Lands and Forests, Toronto, Ont.

Province of Quebec—The Chief Engineer, Hydraulic Service, Department of Lands and Forests, Quebec, Que.

Province of New Brunswick—The Chairman of the New Brunswick Electric Power Commission, Saint John, N.B.

Province of Nova Scotia—The Chairman of the Nova Scotia Power Commission, Halifax, N.S.

Province of Prince Edward Island—The Provincial Secretary-Treasurer, Charlottetown, P.E.I.

For general information regarding the water-powers of the Dominion, application should be made to the Director of Water Power, Department of the Interior, Ottawa.



## CHAPTER V

### TRANSPORTATION IN CANADA

Canada's transportation systems have rendered incalculable aid in the development of the national domain. They have been responsible in great measure for the extension of the basic industries of the field, forest, mine, and fishery and have contributed in no small degree to the upbuilding of manufacturing industries.

There are few countries so dependent on transportation as Canada and few there are of equally large extent so well provided with such services.

#### RAILWAYS

The need for a large railway mileage can be readily understood when it is remembered that the distance from Halifax to Vancouver is some 3,500 miles and that the great prairie grain growing provinces are situated far inland from both the Atlantic and Pacific coasts. Moreover, the older industrial sections of Ontario and Quebec, though tributary to the St. Lawrence waterway, are located well toward the middle of the continent and are also many hundreds of miles distant from one of their best markets, the western provinces.

Canada stands second among nations in point of railway mileage but with a population of about 10,000,000 is first in proportion of mileage to population with one mile of railway to each 230 inhabitants.

The Dominion is covered by a network of railway trackage of nearly 42,000 miles, over which were carried in 1931 some 26,000,000 people and 86 million tons of freight, with aggregate net earnings of over \$37,500,000. The number of passengers carried one mile was approximately 1,750,000,000. The total secondary and industrial tracks, yard tracks, and sidings amounts to over 14,000 miles, making a grand total for all tracks of over 56,000 miles. New branch lines are graded, new tracks and heavier steel laid out, and a development program commensurate with the economic needs of the country is prosecuted with vigour every year.

This vast system of Canadian trackage is almost wholly operated by two of the largest railway organizations in the world, i.e., the Canadian Pacific Railway and the Canadian National Railways. These two railway organizations serve all the principal cities and seaports of the Dominion, providing transportation facilities for the agricultural and industrial products of the various parts of the country. They maintain excellent freight and express services, making it unnecessary for dealers and jobbers to carry large stocks. They also operate inland and ocean steamship lines and conduct their own telegraph and hotel systems. Both railways have offices and agents in all the principal cities of the world.

The Canadian National system operates at present 22,056 miles of lines and carried in 1931, 36,364,644 tons of freight and 12,695,776 passengers. The Canadian Pacific Railway has a railway network of 15,752 miles and carried in 1931, 25,856,121 tons of freight and 8,522,996 passengers.

### Freight Rates

The first consideration before fixing freight rates is a classification of the freight into a number of groups according to type of commodity. In Canada this classification places the various commodities in ten groups plus additional groups based on multiples of the first class rate. The only difference existing in different parts of the country is that pertaining to mixed car loads—the rule in the western district being confined to trade lists while that in the east is not so restricted. Class rates which are applied in conjunction with the classification apply on the movement of finished or semi-finished products. The movement of more or less raw materials and some semi-finished articles is largely on what are known as commodity rates—these being special rates applicable to a particular commodity or group of commodities between respective points specified in the tariffs. In determining what rating or group in the classification a commodity will be placed, consideration is given to such factors as value, car space, packing, susceptibility to damage and various other conditions. The Canadian Freight Association handles the classification lists for the railways subject to the approval of the Board of Railway Commissioners. Classification lists are revised from time to time and must be advertised.

Factors taken into consideration in establishing freight rates are similar to those of classification with the addition of cost of service, comprising terminal and road haulage charges. Competition between railroads, highways, and water systems is also taken into consideration. In general Canadian freight rates are on a most favourable basis and the average revenue per ton mile is practically the lowest in the world.

In 1931 there were 85,933,206 tons of freight carried with receipts per ton hauled of 83.05. The average length of freight haul was 347 miles, and the average train load 514 tons net.

### Board of Railway Commissioners

The government control of transportation in Canada is vested in the Board of Railway Commissioners which has jurisdiction in matters relating to the location, construction, and general operation of railways. The most important powers of the Board relate to railway rate control. It has also narrower powers applying to the regulation of telephone, telegraph, and express rates.

Standard railway rates are approved by the Board; these are maxima and may not be exceeded by the railway companies which, however, have power to fix special rates lower than these, without the approval of the Board being necessary, but the Board has the power, on complaint, or on its own motion, to direct changes therein.

Appeal from any decision may be made to the Governor in Council but the power to rescind or vary usually consists in referring to the Board for reconsideration. Since 1904 to date, the Board has dealt with some 103,000 applications, and the great bulk of these were dealt with informally. Of the 10,000 odd cases which have been formally heard, there have been appeals to the Supreme Court of Canada or to the Governor in Council in about 1 per cent.

## Canadian Export Freight Rates

It is realized that, even in a table so extensive as the one appearing on the succeeding pages, full justice cannot be done to all the exportable products of Canada nor to all places producing them. The commodities mentioned may be considered simply as samples, but the statement is suggestive of the variety and range of production and of the widely distributed area over which Canada's industrial life is spread.

## Electric Railways

Electric railways in Canada have a total length of 1,982 miles with an equipment of 4,050 passenger cars and 516 baggage and freight cars. In 1931 they carried 720,468,361 passengers and 1,977,441 tons of freight.

In the cities of Eastern Canada electric street railways are generally operated by private companies under city franchise while in a considerable number of cities in Ontario and the west they are owned and operated by the municipalities. In addition to the street railways there is quite a large mileage of electric suburban or interurban lines, especially in the Toronto, Niagara, and Lake Erie districts where considerable freight is carried, and on the Pacific coast where the British Columbia Electric Railway operates several hundred freight cars.

## HIGHWAYS

On account of the immense area and the relatively small and scattered population, the highways of Canada constitute a tremendous auxiliary to the railway systems.

In 1919 the Dominion Government authorized the expenditure of \$20,000,000 in the form of grants to the various provinces for the purpose of building new highways and improving existing highways in Canada. The Minister of Railways and Canals and the various provincial Government departments were entrusted with the various road projects and when the original Act was extended from 1924 to March 31, 1928, it made possible projected road agreements covering a total distance of 8,735 miles.

The building of new roads and the improvement of those already in use is a matter of such general interest that numerous organizations have been developed throughout the country for the purpose of advising and assisting the various governments in the work. Good roads associations, assisted by the auto and motor clubs, are to be found in most of the provinces for the distribution of propaganda and the education of the public in the need for improved highway routes.

The use of the automobile has been of great benefit in promoting social intercourse and in facilitating the transaction of business among the dwellers of both urban and rural districts. With increased improved highway mileage, motor transport is rapidly becoming more important and is now operating between all large centres.

In 1931 the highways of Canada totalled 401,150 miles, of which 87,366 miles were surfaced and 313,784 miles unsurfaced roads. Of the total surfaced roads 80,649 miles were gravel and 6,717 miles paved roads.

STATEMENT OF RAILWAY FREIGHT RATES ON A NUMBER OF THE PRINCIPAL  
PRODUCTION TO CANADIAN

Rates are in dollars and cents per hundred

TO PORTS OF EXPORT

Commodity	From producing point	Montreal, Que.			Quebec, Que.		
		Rates per 100 lbs.	Minimum weight per carload for which rate will apply	Distance in miles to port	Rates per 100 lbs.	Minimum weight per carload for which rate will apply	Distance in miles to port
		\$	Lbs.		\$	Lbs.	
Agricultural implements,	Woodstock, N.B.....	.51	24,000	454	.45½	24,000	476
	St. André de						
	Kamouraska, Que.....	.38½	24,000	257	.29	24,000	118
	Smiths Falls, Ont.....	.27½	30,000	134	.32½	30,000	295
	Peterborough, Ont.....	.35½	24,000	268	.37½	24,000	429
	Aurora, Ont.....	.39	24,000	364	.41	24,000	532
	Toronto, Ont.....	.31½	30,000	334	.31½	30,000	503
	Hamilton, Ont.....	.31½	30,000	373	.31½	30,000	542
	Elora, Ont.....	.32½	30,000	397	.32½	30,000	577
	Brantford, Ont.....	.31½	30,000	394	.31½	30,000	562
	St. Marys, Ont.....	.39	24,000	434	.39	24,000	602
Angle bars, steel, carloads....	Sydney, N.S.....	.37	40,000	956	.31	40,000	818
	Montreal, Que.....	—	40,000	—	.15	36,000	172
	Hamilton, Ont.....	.22	45,000	373	.22	45,000	542
	Sault Ste. Marie, Ont.....	.45½	40,000	623	.56½	36,000	770
Automobiles, passenger, carloads.	Oshawa, Ont.....	.60	15,000	301	.60	15,000	469
	Toronto, Ont.....	.60	15,000	334	.60	15,000	503
	Windsor, Ont.....	.80½	15,000	555	.80½	15,000	724
	Ford, Ont.....	.80½	15,000	558	.80½	15,000	727
carloads.....	Saint John, N.B.....	.54	26,000	488	.53	26,000	497
	Montreal, Que.....	—	—	—	.15	30,000	172
	Toronto, Ont.....	.37½	28,000	334	.37½	28,000	503
	Kitchener, Ont.....	.37½	28,000	397	.37½	28,000	565
Bicycles and joycycles, less than carloads.	Weston, Ont.....	1.30	—	343	1.30	—	511
Box shooks, carloads.....	Toronto, Ont.....	.19½	40,000	334	.19½	40,000	503
	New Westminster, B.C....	.90	50,000	2,874	.90	50,000	2,892
Breakfast foods and cereals, carloads. (Uncooked).	Peterborough, Ont.....	.20	50,000	284	.21	50,000	453
	Niagara Falls, Ont.....	.21	50,000	411	.21	50,000	579
	London, Ont.....	.21½	50,000	445	.21½	50,000	614
	Windsor, Ont.....	.23½	50,000	555	.23½	50,000	724
Brushes, less than carloads....	Saint John, N.B.....	.92	—	488	.88½	—	497
	Montreal, Que.....	—	—	—	.30	—	172
	Morrisburg, Ont.....	.51	—	93	.70	—	265
	Toronto, Ont.....	.79	—	334	.79	—	503
	Hamilton, Ont.....	.82½	—	373	.82½	—	542
	Port Elgin, Ont.....	1.08	—	481	1.08	—	650
Butter, carloads.....	Montreal, Que.....	—	20,000	—	.22½	20,000	172
	Peterborough, Ont.....	.59½	20,000	284	.60	20,000	453
	Toronto, Ont.....	.60	20,000	334	.60	20,000	503
	Hamilton, Ont.....	.62	20,000	373	.62	20,000	542
	Calgary, Alta.....	2.46	50,000	2,221	2.46	50,000	2,215
	Edmonton, Alta.....	2.46	50,000	2,148	2.46	50,000	2,142
	Prince Albert, Sask.....	2.28	50,000	1,876	2.28	50,000	1,870
	Saskatoon, Sask.....	2.20	50,000	1,825	2.20	50,000	1,819
	Moose Jaw, Sask.....	2.10	50,000	1,752	2.10	50,000	1,746
	Regina, Sask.....	2.05	50,000	1,711	2.05	50,000	1,705
	Winnipeg, Man.....	1.61	50,000	1,355	1.61	50,000	1,349
	Brantford, Ont.....	.64	20,000	394	.64	20,000	563
Cable, copper, carloads.....	Montreal, Que.....	—	30,000	—	.19	30,000	172
	Toronto, Ont.....	.44	30,000	334	.44	30,000	503
	Hamilton, Ont.....	.44	30,000	373	.44	30,000	542
Calcium carbide, carloads....	Shawinigan Falls, Que.....	.19½	40,000	94	.19½	40,000	91
	Welland, Ont.....	.31½	40,000	414	.31½	40,000	582



## COMMODITIES MANUFACTURED IN CANADA FOR EXPORT, FROM POINTS OF

POUNDS, EXCEPT WHERE OTHERWISE INDICATED

## FROM CANADA

Saint John, N.B.			Halifax, N.S.			Vancouver, B.C.		
Rates per 100 lbs.	Minimum weight per carload for which rate will apply	Distance in miles to port	Rates per 100 lbs.	Minimum weight per carload for which rate will apply	Distance in miles to port	Rates per 100 lbs.	Minimum weight per carload for which rate will apply	Distance in miles to port
\$	Lbs.		\$	Lbs.		\$	Lbs.	
.27	24,000	132	.37	24,000	385	1.14	30,000	3,316
.37	24,000	482	.38	24,000	581	1.11	30,000	3,005
.33 $\frac{1}{2}$	30,000	600	.33 $\frac{1}{2}$	30,000	949	1.00	30,000	2,750
.39 $\frac{1}{2}$	24,000	734	.39 $\frac{1}{2}$	24,000	1,084	1.00	30,000	2,691
.41	24,000	996	.41	24,000	1,164	1.00	30,000	2,743
.33 $\frac{1}{2}$	30,000	810	.33 $\frac{1}{2}$	30,000	1,134	1.00	30,000	2,697
.33 $\frac{1}{2}$	30,000	850	.33 $\frac{1}{2}$	30,000	1,173	1.00	30,000	2,732
.34 $\frac{1}{2}$	30,000	881	.34 $\frac{1}{2}$	30,000	1,236	1.00	30,000	2,723
.33 $\frac{1}{2}$	30,000	1,026	.33 $\frac{1}{2}$	30,000	1,194	1.00	30,000	2,822
.41	24,000	943	.41	24,000	1,233	1.00	30,000	2,803
* 2.80	67,200	432	* 1.90	67,200	290	.82	80,000	3,705
.34 $\frac{1}{2}$	40,000	488	.37 $\frac{1}{2}$	40,000	803	.72	80,000	2,882
.24	45,000	850	.24	45,000	1,173	.72	80,000	2,732
.66 $\frac{1}{2}$	36,000	1,091	.67 $\frac{1}{2}$	36,000	1,720	.72	80,000	2,476
.74	15,000	793	.74	15,000	1,101	2.10	15,000	2,731
.74	15,000	810	.74	15,000	1,134	2.10	15,000	2,697
.82 $\frac{1}{2}$	15,000	1,033	.82 $\frac{1}{2}$	15,000	1,355	2.10	15,000	2,716
.82 $\frac{1}{2}$	15,000	1,036	.82 $\frac{1}{2}$	15,000	1,358	2.10	15,000	2,719
—	—	—	.33	26,000	279	1.16	50,000	3,349
.38	28,000	488	.38	28,000	803	1.00	50,000	2,882
.39 $\frac{1}{2}$	28,000	810	.39 $\frac{1}{2}$	28,000	1,134	1.00	50,000	2,697
.39 $\frac{1}{2}$	28,000	875	.39 $\frac{1}{2}$	28,000	1,197	1.00	50,000	2,758
1.49 $\frac{1}{2}$	—	815	1.49 $\frac{1}{2}$	—	1,413	2.65	—	2,689
.31	40,000	810	.31	40,000	1,134	1.48 $\frac{1}{2}$	36,000	2,697
.90	50,000	3,341	.90	50,000	3,538	.08	36,000	14
.23	50,000	753	.23	50,000	1,084	1.12	40,000	2,691
.23	50,000	1,043	.23	50,000	1,211	1.12	40,000	2,839
.23 $\frac{1}{2}$	50,000	940	.23 $\frac{1}{2}$	50,000	1,245	1.12	40,000	2,783
.25 $\frac{1}{2}$	50,000	1,033	.25 $\frac{1}{2}$	50,000	1,355	1.12	40,000	2,716
—	—	—	.53	—	279	2.83	—	3,349
.97	—	488	.97	—	803	2.55	—	2,882
.99 $\frac{1}{2}$	—	728	.99 $\frac{1}{2}$	—	896	2.55	—	2,911
.99 $\frac{1}{2}$	—	810	.99 $\frac{1}{2}$	—	1,134	2.55	—	2,697
.99 $\frac{1}{2}$	—	850	.99 $\frac{1}{2}$	—	1,173	2.55	—	2,732
1.20 $\frac{1}{2}$	—	1,113	1.20 $\frac{1}{2}$	—	1,281	2.55	—	2,887
.65	20,000	488	.65	20,000	803	2.10	20,000	2,882
.66	20,000	753	.66	20,000	1,084	2.10	20,000	2,691
.66	20,000	810	.66	20,000	1,134	2.10	20,000	2,697
.66	20,000	850	.66	20,000	1,173	2.10	20,000	2,732
2.49	50,000	2,693	2.49	50,000	2,861	1.37	20,000	642
2.49	50,000	2,620	2.49	50,000	2,788	1.37	20,000	766
2.31	50,000	2,349	2.31	50,000	2,517	1.97	20,000	1,148
2.23	50,000	2,297	2.23	50,000	2,465	1.92 $\frac{1}{2}$	20,000	1,088
2.13	50,000	2,225	2.13	50,000	2,393	1.92 $\frac{1}{2}$	20,000	1,067
2.08	50,000	2,183	2.08	50,000	2,351	1.92 $\frac{1}{2}$	20,000	1,109
1.64	50,000	1,827	1.64	50,000	1,995	2.21	20,000	1,465
.66	20,000	1,026	.66	20,000	1,194	2.10	20,000	2,822
.46	30,000	488	.46	30,000	803	1.00	50,000	2,882
.46	30,000	810	.46	30,000	1,134	1.00	50,000	2,697
.46	30,000	850	.46	30,000	1,173	1.00	50,000	2,732
.29 $\frac{1}{2}$	40,000	565	.29 $\frac{1}{2}$	40,000	733	1.00	50,000	2,857
.33 $\frac{1}{2}$	40,000	1,046	.33 $\frac{1}{2}$	40,000	1,213	1.00	50,000	2,842

\*Per ton of 2,240 pounds.

STATEMENT OF RAILWAY FREIGHT RATES ON A NUMBER OF THE PRINCIPAL  
PRODUCTION TO CANADIAN

Rates are in dollars and cents per hundred

TO PORTS OF EXPORT

Commodity	From producing point	Montreal, Que.			Quebec, Que.		
		Rates per 100 lbs.	Minimum weight per carload for which rate will apply	Distance in miles to port	Rates per 100 lbs.	Minimum weight per carload for which rate will apply	Distance in miles to port
		\$	Lbs.		\$	Lbs.	
Canned fish, carloads.....	Hubbards, N.S.....	.56	36,000	831	.42	24,000	692
	Blacks Harbour (Pennfield), N.B.....	.42	36,000	459	.42	24,000	621
	Loggieville, N.B.....	.42	36,000	587	.53	24,000	448
	Montreal, Que.....	—	24,000	—	.15	36,000	172
	Vancouver, B.C.....	.80	60,000	2,882	.80	60,000	2,905
Canned fruit and vegetables carloads.	Quebec, Que.....	.38½	24,000	172	—	—	—
	St. Johns, Que.....	.20½	24,000	27	.38½	24,000	187
	Hamilton, Ont.....	.32	36,000	373	.32	36,000	542
	Dunnville, Ont.....	.32	36,000	412	.32	36,000	581
	Windsor, Ont.....	.35	36,000	555	.35	36,000	724
	Keremeos, B.C.....	1.09	60,000	—	2.74½	24,000	—
	Kelowna, B.C.....	.80	60,000	2,527	.80	60,000	2,766
	New Westminster, B.C.....	.80	60,000	2,874	.80	60,000	2,892
Canned lobsters, carloads....	Pictou, N.S.....	.42	36,000	762	.41	36,000	623
	Clarks Harbour (Barring- ton Passage), N.S.....	.56	36,000	995	.56	24,000	856
	Port Elgin, N.B.....	.42	36,000	673	.53	24,000	534
	Shediac, N.B.....	.42	36,000	631	.53	24,000	493
	Chatham, N.B.....	.42	36,000	581	.53	24,000	442
	—	—	—	—	—	—	—
Cement, Portland, carloads..	Montreal, Que.....	—	—	—	.14	50,000	172
	Belleville, Ont.....	.25	60,000	221	.31½	50,000	390
	St. Marys, Ont.....	.27½	60,000	434	.32½	50,000	602
	Victoria, B.C.....	1.53½	40,000	2,965	1.53½	40,000	2,988
	—	—	—	—	—	—	—
Chocolates and confectionery, less carloads.	St. Stephen, N.B.....	.92	—	438	.88½	—	599
	Montreal, Que.....	—	—	—	.26½	—	172
	Toronto, Ont.....	.69	—	334	.69	—	503
	Kitchener, Ont.....	.83	—	397	.83	—	565
	London, Ont.....	.88	—	445	.88	—	614
Corsets, less carloads.....	Quebec, Que.....	.72	—	172	—	—	—
	St. Hyacinthe, Que.....	.44	—	36	.65½	—	136
	Toronto, Ont.....	.79	—	334	.79	—	503
Furniture (chairs), carloads.	Bass River (Londonderry), N.S.....	.39½	20,000	722	.45	24,000	583
	Granby, Que.....	.24	24,000	54	.38½	24,000	216
	Princeville, Que.....	.33	24,000	117	.28	24,000	64
	Beauharnois, Que.....	.20½	24,000	40	.36½	24,000	199
	Victoriaville, Que.....	.31½	24,000	108	.29	24,000	73
	Chesley, Ont.....	.58	24,000	463	.67	24,000	632
	Kincardine, Ont.....	.58	24,000	493	.67	24,000	662
	Owen Sound, Ont.....	.58	24,000	498	.67	24,000	666
	—	—	—	—	—	—	—
Gypsum, carloads.....	Iona, N.S.....	.41½	40,000	900	0.40½	40,000	761
	Montreal, Que.....	—	40,000	—	.14	40,000	172
	Paris, Ont.....	.31½	40,000	397	.31½	40,000	566
	Winnipeg, Man.....	.77½	40,000	1,355	.77½	40,000	1,349
Hardware, less carloads.....	Roxton Pond (South Rox- ton), Que.....	.54	—	93	.67	—	341
	Brockville, Ont.....	.47	—	126	.54½	—	295
	Belleville, Ont.....	.54	—	221	.56	—	390
	Guelph, Ont.....	.64	—	383	.64	—	551
	Hamilton, Ont.....	.62	—	373	.62	—	542
	—	—	—	—	—	—	—
Hoes, rakes, hand tools, etc., less carloads.	Montreal, Que.....	—	—	—	.22½	—	172
	Danville, Que.....	.58	—	89	.62	—	93
	St. Catharines, Ont.....	.67	—	399	.67	—	569
	Tillsonburg, Ont.....	.72	—	427	.72	—	596
	St. Thomas, Ont.....	.75	—	452	.75	—	621

# TRANSPORTATION IN CANADA

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## COMMODITIES MANUFACTURED IN CANADA FOR EXPORT, FROM POINTS OF PORTS OF EXPORT—*Continued.*

pounds, except where otherwise indicated

FROM CANADA

Saint John, N.B.			Halifax, N.S.			Vancouver, B.C.		
Rates per 100 lbs.	Minimum weight per carload for which rate will apply	Distance in miles to port	Rates per 100 lbs.	Minimum weight per carload for which rate will apply	Distance in miles to port	Rates per 100 lbs.	Minimum weight per carload for which rate will apply	Distance in miles to port
\$	Lbs.		\$	Lbs.		\$	Lbs.	
.33	24,000	306	.15	24,000	37	1.40	40,000	3,578
—	24,000	—	—	24,000	—	1.34	40,000	3,419
.26	24,000	179	.32	24,000	278	1.34	40,000	3,334
.38	36,000	488	.38	36,000	803	1.18	40,000	2,882
.80	60,000	3,349	.80	60,000	3,551	—	—	—
.33	36,000	497	.33	36,000	665	1.28	40,000	2,905
.33	36,000	453	.33	36,000	818	1.24	40,000	2,797
.34	36,000	850	.34	36,000	1,173	1.18	40,000	2,732
.34	36,000	1,043	.34	36,000	1,212	1.18	40,000	2,840
.37	36,000	1,033	.37	36,000	1,355	1.18	40,000	2,716
2.80½	24,000	—	2.82½	24,000	—	—	—	—
.80	60,000	3,094	.80	60,000	3,412	.68	24,000	289
.80	60,000	3,341	.80	60,000	3,538	.14	24,000	14
.30	24,000	237	.23	24,000	119	1.36	40,000	3,509
.40	24,000	470	.26	24,000	200	1.52	40,000	3,739
.26	24,000	148	.26	24,000	171	1.36	40,000	3,420
.23	24,000	106	.27	24,000	192	1.34	40,000	3,379
.26	24,000	173	.32	24,000	272	1.34	40,000	3,329
.17	50,000	488	.17	50,000	803	1.48½	40,000	2,882
.33½	50,000	853	.33½	50,000	1,021	1.48½	40,000	2,811
.34½	50,000	943	.34½	50,000	1,233	1.48½	40,000	2,803
1.60	40,000	3,432	1.61	40,000	3,634	.21	40,000	83
.35	—	86	.90	—	361	2.83	—	3,299
.83½	—	488	.83½	—	803	2.55	—	2,882
.87	—	810	.87	—	1,134	2.55	—	2,697
.87	—	875	.87	—	1,197	2.55	—	2,758
.91	—	940	.91	—	1,245	2.55	—	2,783
.97	—	497	.97	—	665	2.50	—	2,905
.97	—	464	.97	—	768	2.62	—	2,936
.99½	—	810	.99½	—	1,134	2.50	—	2,697
.20	20,000	197	.15½	20,000	82	1.68	24,000	3,470
.42	20,000	675	.42	20,000	843	1.56	24,000	2,960
.38	24,000	528	.38	24,000	696	1.60	24,000	2,968
.39½	24,000	663	.39½	24,000	831	1.56	24,000	2,880
.42	20,000	537	.42	20,000	705	1.56	24,000	2,951
.80½	14,000	1,095	.80½	14,000	1,263	1.50	24,000	2,868
.80½	14,000	1,125	.80	14,000	1,293	1.50	24,000	2,898
.80½	14,000	1,129	.80½	14,000	1,298	1.50	24,000	2,766
.25	40,000	375	.21	40,000	233	1.53½	40,000	3,647
.32	40,000	488	.32	40,000	803	1.48½	40,000	2,882
.33½	40,000	1,029	.33½	40,000	1,197	1.48½	40,000	2,827
.86	40,000	1,827	.87½	40,000	1,195	.92	40,000	1,465
.65	—	429	.65	—	922	2.66	—	2,954
.66	—	647	.66	—	926	2.55	—	2,777
.66	—	712	.66	—	1,021	2.55	—	2,808
.66	—	861	.66	—	1,183	2.55	—	2,743
.66	—	850	.66	—	1,173	2.55	—	2,732
.71	—	488	.71	—	803	2.55	—	2,882
.91	—	556	.94½	—	725	2.66	—	2,979
.74	—	1,032	.74	—	1,200	2.55	—	2,833
.77½	—	918	.77½	—	1,227	2.55	—	2,800
.77½	—	928	.77½	—	1,252	2.55	—	2,809

STATEMENT OF RAILWAY FREIGHT RATES ON A NUMBER OF THE PRINCIPAL  
PRODUCTION TO CANADIAN

Rates are in dollars and cents per hundred

TO PORTS OF EXPORT

Commodity	From producing point	Montreal, Que.			Quebec, Que.		
		Rates per 100 lbs.	Minimum weight per carload for which rate will apply	Distance in miles to port	Rates per 100 lbs.	Minimum weight per carload for which rate will apply	Distance in miles to port
		\$	Lbs.		\$	Lbs.	
Hosiery, less carloads.....	Drummondville, Que.....	.51	—	65	.62	—	107
	St. Catharines, Ont.....	.90	—	399	.90	—	569
	Galt, Ont.....	.94	—	399	.94	—	559
	Hamilton, Ont.....	.82½	—	373	.82½	—	542
	London, Ont.....	1.00½	—	445	1.00½	—	614
Lawn mowers, less carloads...	Dunnville, Ont.....	.97	—	412	.97	—	581
	Brockville, Ont.....	.47	—	126	.54½	—	295
	St. Marys, Ont.....	.75	—	434	.75	—	602
	Guelph, Ont.....	.67	—	383	.67	—	551
	St. Hyacinthe, Que.....	.34½	—	36	.51	—	136
Leather, sole, less carloads....	Huntsville, Ont.....	.69	—	342	.77½	—	494
	Acton, Ont.....	.72	—	370	.79	—	539
	Kitchener, Ont.....	.74½	—	397	.83	—	565
	London, Ont.....	.79½	—	445	.88	—	614
	Montreal, Que.....	—	—	—	.26½	—	172
Leather, upper, less carloads.	Kingston, Ont.....	.56½	—	175	.61½	—	344
	Oshawa, Ont.....	.67	—	301	.69	—	469
	Newmarket, Ont.....	.72	—	368	.79	—	537
	Montreal, Que.....	—	—	—	.19	—	172
Macaroni, less carloads.....	St. Catharines, Ont.....	.44	—	399	.44	—	569
Meats, fresh, carloads.....	Calgary, Alta.....	1.64	21,000	2,221	1.64	21,000	2,215
	Edmonton, Alta.....	1.64	21,000	2,148	1.64	21,000	2,142
	Prince Albert, Sask.....	1.55	21,000	1,876	1.55	21,000	1,870
	Moose Jaw, Sask.....	1.43½	21,000	1,752	1.43½	21,000	1,746
	Regina, Sask.....	1.39	21,000	1,711	1.39	21,000	1,705
	Winnipeg, Man.....	1.11	21,000	1,355	1.11	21,000	1,349
	Peterborough, Ont.....	.53½	20,000	267	.53½	21,000	429
	Toronto, Ont.....	.53½	20,000	334	.53½	21,000	503
	Brantford, Ont.....	.53½	21,000	394	.64	21,000	563
	Hamilton, Ont.....	.53½	21,000	373	.53½	21,000	542
	Montreal, Que.....	—	—	—	.22½	21,000	172
	Calgary, Alta.....	1.23	35,000	2,221	1.23	35,000	2,215
	Edmonton, Alta.....	1.23	35,000	2,148	1.23	35,000	2,142
Meats, cured, carloads.....	Prince Albert, Sask.....	1.15	35,000	1,876	1.15	35,000	1,870
	Moose Jaw, Sask.....	1.06½	35,000	1,752	1.06½	35,000	1,746
	Regina, Sask.....	1.02½	35,000	1,711	1.02½	35,000	1,705
	Winnipeg, Man.....	.79	35,000	1,355	.79	35,000	1,349
	Peterborough, Ont.....	.26	30,000	267	.27½	35,000	429
	Toronto, Ont.....	.27½	30,000	334	.27½	35,000	503
	Brantford, Ont.....	.37½	30,000	394	.37½	30,000	563
	Hamilton, Ont.....	.27½	30,000	373	.27½	35,000	542
	Montreal, Que.....	—	—	—	.15	30,000	172
	Saint John, N.B.....	.67	—	488	.65½	—	497
	Montreal, Que.....	—	—	—	.19	—	172
	Montreal, Que.....	—	—	—	.15	36,000	172
Paint, carloads.....	Toronto, Ont.....	.37½	36,000	334	.37½	36,000	503
	Windsor, Ont.....	.42	36,000	555	.42	36,000	724
	Winnipeg, Man.....	1.18	30,000	1,355	1.18	30,000	1,349
	St. Jérôme, Que.....	.27½	—	33	.54½	—	178
Paper, book and writing, less carloads.	Mille Roches, Ont.....	.37½	—	73	.54½	—	245
	Cornwall, Ont.....	.36½	—	68	.54½	—	240
	Merriton, Ont.....	.64	—	402	.64	—	571
	Montreal, Que.....	—	—	—	.15	36,000	172
Paper, newsprint, carloads....	Bathurst, N.B.....	.25	40,000	525	.25	30,000	386
	Three Rivers, Que.....	.15	40,000	96	.15	40,000	78
	Hull, Que.....	.18	40,000	119	.20	40,000	268
	Iroquois Falls, Ont.....	.48½	40,000	569	.54½	40,000	605
	Port Arthur, Ont.....	.41½	40,000	993	.43½	40,000	1,040



# TRANSPORTATION IN CANADA

131

## COMMODITIES MANUFACTURED IN CANADA FOR EXPORT, FROM POINTS OF PORTS OF EXPORT—*Continued.*

pounds, except where otherwise indicated

### FROM CANADA

Saint John, N.B.			Halifax, N.S.			Vancouver, B.C.		
Rates per 100 lbs.	Minimum weight per carload for which rate will apply	Distance in miles to port	Rates per 100 lbs.	Minimum weight per carload for which rate will apply	Distance in miles to port	Rates per 100 lbs.	Minimum weight per carload for which rate will apply	Distance in miles to port
\$	Lbs.		\$	Lbs.		\$	Lbs.	
.97	—	460	.97	—	738	2.92	—	2,975
.99 <sup>1</sup> / <sub>2</sub>	—	1,032	.99 <sup>1</sup> / <sub>2</sub>	—	1,200	2.80	—	2,833
.99 <sup>1</sup> / <sub>2</sub>	—	863	.99 <sup>1</sup> / <sub>2</sub>	—	1,199	2.80	—	2,746
.99 <sup>1</sup> / <sub>2</sub>	—	850	.99 <sup>1</sup> / <sub>2</sub>	—	1,173	2.80	—	2,733
1.03 <sup>1</sup> / <sub>2</sub>	—	940	1.03 <sup>1</sup> / <sub>2</sub>	—	1,245	2.80	—	2,783
.99 <sup>1</sup> / <sub>2</sub>	—	1,043	.99 <sup>1</sup> / <sub>2</sub>	—	1,212	2.80	—	2,840
.74	—	647	.74	—	926	2.55	—	2,777
.77 <sup>1</sup> / <sub>2</sub>	—	943	.77 <sup>1</sup> / <sub>2</sub>	—	1,233	2.55	—	2,803
.74	—	861	.74	—	1,183	2.55	—	2,743
.78 <sup>1</sup> / <sub>2</sub>	—	464	.82	—	768	2.19	—	2,936
.93 <sup>1</sup> / <sub>2</sub>	—	968	.94 <sup>1</sup> / <sub>2</sub>	—	1,136	2.10	—	2,552
.87	—	1,002	.87	—	1,170	2.10	—	2,775
.87	—	875	.87	—	1,197	2.10	—	2,758
.91	—	940	.91	—	1,245	2.10	—	2,783
.78 <sup>1</sup> / <sub>2</sub>	—	488	.82	—	803	2.10	—	2,882
.84 <sup>1</sup> / <sub>2</sub>	—	679	.87	—	976	2.10	—	2,795
.87	—	793	.87	—	1,101	2.10	—	2,731
.91	—	1,000	.91	—	1,168	2.10	—	2,739
.46	—	488	.46	—	803	2.10	—	2,882
.46	—	1,032	.46	—	1,200	2.10	—	2,833
1.66	30,000	2,693	1.66	30,000	2,861	1.10	20,000	642
1.66	30,000	2,620	1.66	30,000	2,788	1.10	20,000	766
1.57	30,000	2,349	1.57	30,000	2,517	1.53	20,000	1,148
1.45 <sup>1</sup> / <sub>2</sub>	30,000	2,225	1.45 <sup>1</sup> / <sub>2</sub>	30,000	2,393	1.49	20,000	1,067
1.14	30,000	2,183	1.41	30,000	2,351	1.50	20,000	1,109
1.13	30,000	1,827	1.13	30,000	1,995	1.74	20,000	1,465
.55 <sup>1</sup> / <sub>2</sub>	21,000	734	.55 <sup>1</sup> / <sub>2</sub>	21,000	1,084	1.70	20,000	2,691
.55 <sup>1</sup> / <sub>2</sub>	21,000	810	.55 <sup>1</sup> / <sub>2</sub>	21,000	1,134	1.70	20,000	2,697
.66	21,000	1,026	.66	21,000	1,194	1.70	20,000	2,822
.55 <sup>1</sup> / <sub>2</sub>	21,000	850	.55 <sup>1</sup> / <sub>2</sub>	21,000	1,173	1.70	20,000	2,732
.54 <sup>1</sup> / <sub>2</sub>	21,000	488	.54 <sup>1</sup> / <sub>2</sub>	21,000	803	1.70	20,000	2,882
1.25	35,000	2,693	1.25	35,000	2,861	.98	24,000	642
1.25	35,000	2,620	1.25	35,000	2,788	.98	24,000	766
1.17	35,000	2,349	1.17	35,000	2,517	1.38	24,000	1,148
1.08 <sup>1</sup> / <sub>2</sub>	35,000	2,225	1.08 <sup>1</sup> / <sub>2</sub>	35,000	2,393	1.32	24,000	1,067
1.04 <sup>1</sup> / <sub>2</sub>	35,000	2,183	1.04	35,000	2,351	1.35	24,000	1,109
.81	35,000	1,827	.81	35,000	1,995	1.58	24,000	1,465
.31 <sup>1</sup> / <sub>2</sub>	35,000	734	.31 <sup>1</sup> / <sub>2</sub>	35,000	1,084	1.50	24,000	2,691
.31 <sup>1</sup> / <sub>2</sub>	35,000	810	.31 <sup>1</sup> / <sub>2</sub>	35,000	1,134	1.50	24,000	2,697
.31 <sup>1</sup> / <sub>2</sub>	30,000	1,026	.31 <sup>1</sup> / <sub>2</sub>	30,000	1,194	1.50	24,000	2,822
.31 <sup>1</sup> / <sub>2</sub>	35,000	850	.31 <sup>1</sup> / <sub>2</sub>	35,000	1,173	1.50	24,000	2,732
.27	35,000	488	.27	35,000	803	1.50	24,000	2,882
—	—	—	.38	—	279	1.90	—	3,349
.46	—	488	.46	—	803	1.70	—	2,882
.38	36,000	488	.38	36,000	803	1.50	30,000	2,882
.39 <sup>1</sup> / <sub>2</sub>	36,000	810	.39 <sup>1</sup> / <sub>2</sub>	36,000	1,134	1.50	30,000	2,697
.44	36,000	1,033	.44	36,000	1,355	1.50	30,000	2,716
1.29	30,000	1,827	1.31	30,000	1,995	1.42	40,000	1,465
.66	—	510	.66	—	819	2.10	—	2,789
.66	—	708	.66	—	876	2.10	—	2,959
.66	—	703	.66	—	871	2.10	—	2,902
.66	—	1,034	.66	—	1,202	2.10	—	2,830
.12 <sup>1</sup> / <sub>2</sub>	40,000	214	.14	40,000	313	1.16	40,000	3,272
.25	40,000	564	.25	40,000	733	1.00	40,000	2,951
.25	40,000	605	.25	40,000	912	1.00	40,000	2,763
.95 <sup>1</sup> / <sub>2</sub>	30,000	1,063	.97	30,000	1,250	1.00	40,000	2,365
.43 <sup>1</sup> / <sub>2</sub>	40,000	1,461	.43 <sup>1</sup> / <sub>2</sub>	40,000	1,719	1.00	40,000	1,888

STATEMENT OF RAILWAY FREIGHT RATES ON A NUMBER OF THE PRINCIPAL  
PRODUCTION TO CANADIANRates are in dollars and cents per hundred  
TO PORTS OF EXPORT

Commodity	From producing point	Montreal, Que.			Quebec, Que.		
		Rates per 100 lbs.	Minimum weight per carload for which rate will apply	Distance in miles to port	Rates per 100 lbs.	Minimum weight per carload for which rate will apply	Distance in miles to port
Pianos and organs, carloads..	St. Hyacinthe, Que.....	\$ .38½	12,000	36	\$ .58	12,000	136
	Oshawa, Ont.....	.69	12,000	301	.69	12,000	469
	Toronto, Ont.....	.69	12,000	334	.69	12,000	503
	Guelph, Ont.....	.79	12,000	383	.79	12,000	551
	London, Ont.....	.88	12,000	445	.88	12,000	614
Plaster, wall, carloads.....	Iona, N.S.....	.26½	50,000	900	.35	40,000	761
	Montreal, Que.....	—	—	—	.14	40,000	172
	Paris, Ont.....	.24	50,000	398	.29½	50,000	566
	Winnipeg, Man.....	.60½	50,000	1,355	.62½	50,000	1,349
Pulp, chemical, carloads.....	Saint John, N.B.....	.38½	50,000	488	.38½	40,000	497
	Grand Mère, Que.....	.14	50,000	94	.17	50,000	84
	Three Rivers, Que.....	.14	50,000	96	.17	50,000	78
	Kenogami, (Jonquière), Que.....	.40½	40,000	298	.14½	50,000	218
	Sheet Harbour (Upper Musquodoboit), N.S....	.36	40,000	869	.35	40,000	731
Pulp, mechanical, carloads...	Pont Etchemin (St. Romuald), Que.....	.21½	50,000	159	.11½	40,000	21
	Donnacona, Que.....	.20½	50,000	150	.31½	40,000	34
	Buckingham, Que.....	.17	50,000	104	.31½	40,000	274
Rails, steel, carloads.....	Sydney, N.S.....	.56½	40,000	956	.54	40,000	818
	Sault Ste. Marie, Ont.....	*6.29½	60,000	623	*8.90	60,000	770
Records, phonographs, less carloads.	Lachine, Que.....	—	—	8	.30	—	174
	Toronto, Ont.....	.79	—	334	.79	—	503
	London, Ont.....	1.00½	—	445	1.00½	—	614
Refrigerators, carloads.....	Montreal, Que.....	—	—	—	.19	18,000	172
	Renfrew, Ont.....	.43	18,000	164	.45	18,000	323
	Paris, Ont.....	.44	18,000	397	.44	18,000	566
	Owen Sound Ont.....	.54	18,000	498	.54	18,000	666
Shoes, rubber, carloads.....	Granby, Que.....	.24	24,000	54	.56½	20,000	216
	Toronto Ont.....	.44	24,000	334	.44	24,000	503
	Montreal, Que.....	—	—	—	.19	24,000	172
	Kitchener, Ont.....	.44	24,000	397	.44	24,000	565
	Guelph, Ont.....	.44	24,000	383	.44	24,000	551
Stoves electric carloads.....	Ottawa Ont.....	.36½	30,000	116	.44	30,000	268
	Renfrew, Ont.....	.43	30,000	164	.45	30,000	323
	Toronto Ont.....	.44	30,000	334	.44	30,000	503
	London, Ont.....	.46	30,000	445	.46	30,000	614
	Weston, Ont.....	.44	30,000	343	.44	30,000	511
Sugar carloads.....	Halifax N.S.....	.56½	24,000	803	.54	24,000	665
	Saint John, N.B.....	.54	24,000	488	.53	24,000	497
	Montreal, Que.....	—	—	—	.15	40,000	172
	Wallaceburg, Ont.....	.42	40,000	533	.42	40,000	701
	Raymond, Alta.....	1.99	24,000	2,175	2.05	24,000	2,322
Tires, rubber, carloads.....	Montreal, Que.....	—	—	—	.19	20,000	172
	Toronto, Ont.....	.38	30,000	334	.38	30,000	503
	Kitchener Ont.....	.38	30,000	397	.38	30,000	565
Tools, machine, less carloads..	Montreal, Que.....	—	—	—	.26½	—	172
	Brantford, Ont.....	.83	—	394	.83	—	562
	Dundas, Ont.....	.75½	—	375	.75½	—	545
	Hespeler, Ont.....	.83	—	391	.83	—	560
Twine, binder, carloads.....	Montreal, Que.....	—	—	—	.14	24,000	172
	Hamilton, Ont.....	.31½	24,000	373	.31½	24,000	542
	Brantford, Ont.....	.31½	24,000	394	.31½	24,000	562
	Welland, Ont.....	.31½	24,000	414	.31½	24,000	582

\*—Rates are quoted in dollars and cents

COMMODITIES MANUFACTURED IN CANADA FOR EXPORT, FROM POINTS OF PORTS OF EXPORT—*Continued.*

pounds, except where otherwise indicated

FROM CANADA

Saint John, N.B.			Halifax, N.S.			Vancouver, B.C.		
Rates per 100 lbs.	Minimum weight per carload for which rate will apply	Distance in miles to port	Rates per 100 lbs.	Minimum weight per carload for which rate will apply	Distance in miles to port	Rates per 100 lbs.	Minimum weight per carload for which rate will apply	Distance in miles to port
\$	Lbs.		\$	Lbs.		\$	Lbs.	
.83½	12,000	464	.83½	12,000	768	2.66	12,000	2,036
.87	12,000	793	.87	12,000	1,101	2.55	12,000	2,731
.87	12,000	810	.87	12,000	1,134	2.55	12,000	2,697
.87	12,000	861	.87	12,000	1,183	2.55	12,000	2,743
.91	12,000	940	.91	12,000	1,245	2.55	12,000	2,783
.15	50,000	375	.12	50,000	233	—	—	—
.25	36,000	488	.25	36,000	803	.92½	60,000	2,882
.33½	40,000	1,029	.33½	40,000	1,197	.92½	60,000	2,827
.70½	50,000	1,827	.76	50,000	1,995	.92	40,000	1,465
—	—	—	.21	40,000	279	—	—	—
.25	50,000	558	.25	50,000	726	1.52½	40,000	2,850
.25	50,000	564	.25	50,000	733	1.52½	40,000	2,951
.27	50,000	710	.27	50,000	878	1.56	40,000	3,009
.24	40,000	344	.14	40,000	98	—	—	—
.32	40,000	484	.32	40,000	652	1.52½	40,000	2,907
.25	60,000	508	.25	60,000	676	1.48½	40,000	2,875
.36	40,000	589	.36	40,000	946	1.48½	40,000	2,785
*2.30	67,200	432	1.90	67,200	290	.82	80,000	2,705
.47½	40,000	1,091	.47½	40,000	1,369	.72	80,000	2,476
.97	—	640	.97	—	808	2.80	—	2,915
.99½	—	810	.99½	—	1,134	2.80	—	2,697
1.03½	—	940	1.03½	—	1,245	2.80	—	2,783
.46	18,000	488	.46	18,000	803	1.70	14,000	2,882
.53	18,000	677	.53	18,000	967	1.70	14,000	2,691
.46	18,000	1,029	.46	18,000	1,197	1.70	14,000	2,827
.56	18,000	1,129	.56	18,000	1,298	1.70	14,000	2,763
.46	24,000	675	.46	24,000	843	1.59	24,000	2,960
.46	24,000	810	.46	24,000	1,134	1.50	24,000	2,697
.46	24,000	488	.46	24,000	803	1.50	24,000	2,882
.46	24,000	875	.46	24,000	1,197	1.50	24,000	2,758
.46	24,000	861	.46	24,000	1,183	1.50	24,000	2,743
.46	30,000	589	.46	30,000	910	1.15	36,000	2,761
.53	30,000	677	.53	30,000	967	1.15	36,000	2,691
.46	30,000	810	.46	30,000	1,134	1.15	36,000	2,697
.48	30,000	940	.48	30,000	1,245	1.15	36,000	2,783
.46	30,000	815	.46	30,000	1,143	1.15	36,000	2,689
.30	24,000	279	—	—	—	1.68	24,000	3,551
—	—	—	.13	30,000	279	1.66	24,000	3,349
.38	40,000	488	.38	40,000	803	1.50	24,000	2,882
.44	40,000	1,008	.44	40,000	1,332	1.50	24,000	2,890
2.10	24,000	2,643	2.12	24,000	2,996	1.16	24,000	795
.46	20,000	488	.46	20,000	803	1.50	24,000	2,882
.130	30,000	810	.40	30,000	1,134	1.50	24,000	2,697
.40	30,000	875	.40	30,000	1,197	1.50	24,000	2,758
.83½	—	488	.83½	—	803	2.55	—	2,882
.87	—	1,026	.87	—	1,194	2.55	—	2,822
.87	—	1,008	.87	—	1,176	2.55	—	2,804
.87	—	1,023	.87	—	1,191	2.55	—	2,797
.32	24,000	488	.32	24,000	803	1.00	30,000	2,882
.33½	24,000	850	.33½	24,000	1,173	1.00	30,000	2,732
.33½	24,000	1,026	.33½	24,000	1,194	1.00	30,000	2,822
.33½	24,000	1,046	.33½	24,000	1,213	1.00	30,000	2,842

Per ton of 2,240 pounds

## THE CANADIAN INDUSTRIAL FIELD

STATEMENT OF RAILWAY FREIGHT RATES ON A NUMBER OF THE PRINCIPAL  
PRODUCTION TO CANADIAN

Rates are in dollars and cents per hundred

TO PORTS OF EXPORT

Commodity	From producing point	Montreal, Que.			Quebec, Que.		
		Rates per 100 lbs.	Minimum weight per carload for which rate will apply	Distance in miles to port	Rates per 100 lbs.	Minimum weight per carload for which rate will apply	Distance in miles to port
		\$	Lbs.		\$	Lbs.	
Underwear, less carloads,....	Truro, N.S.,.....	1.08	—	739	1.04½	—	600
	Windsor, N.S.,.....	1.20	—	798	1.14	—	660
	Moncton, N.B.,.....	1.04½	—	615	1.01	—	476
	Hamilton, Ont.,.....	.82½	—	373	.82½	—	542
	Galt, Ont.,.....	.94	—	399	.94	—	559
	Woodstock, Ont.,.....	.97	—	416	.97	—	585
	Carleton Place, Ont.,.....	.65	—	149	.70	—	320
Varnish, carloads,.....	Montreal, Que.,.....	—	—	—	.15	36,000	172
	Toronto, Ont.,.....	.37½	36,000	334	.37½	36,000	503
	Windsor, Ont.,.....	.42	36,000	555	.42	36,000	724
	Winnipeg, Man.,.....	1.18	30,000	1,355	1.18	30,000	1,349
Wallpaper, carloads,.....	Montreal, Que.,.....	—	—	—	.19	30,000	172
	Toronto, Ont.,.....	.44	30,000	334	.44	30,000	503
Whiskey, and spirits, carloads..	St. Hyacinthe, Que.,.....	.34½	24,000	36	.51	30,000	136
	Montreal, Que.,.....	—	—	—	.30	30,000	172
	Prescott, Ont.,.....	.36½	30,000	135	.41½	30,000	296
	Toronto, Ont.,.....	.44	30,000	334	.44	30,000	503
	Waterloo, Ont.,.....	.44	30,000	398	.44	30,000	545
	Walkerville, Ont.,.....	.49½	30,000	554	.49½	30,000	722
	Windsor, Ont.,.....	.44	30,000	398	.44	30,000	545
Wire goods, less carloads,.....	Drummondville, Que.,.....	.51	—	65	.62	—	107
	Ottawa, Ont.,.....	.58	—	116	.70	—	268
	Hamilton, Ont.,.....	.82½	—	373	.82½	—	542
	Watford, Ont.,.....	1.04	—	479	1.04	—	647
Wrought iron pipe and tubing, carloads,	Montreal, Que.,.....	—	—	—	.15	36,000	172
	Welland, Ont.,.....	.22	45,000	414	.22	45,000	582
	Guelph Ont.,.....	.22	45,000	383	.22	45,000	551

Prepared by Canadian Manufacturers' Association.



# TRANSPORTATION IN CANADA

135

## COMMODITIES MANUFACTURED IN CANADA FOR EXPORT, FROM POINTS OF PORTS OF EXPORT

pounds, except where otherwise indicated

FROM CANADA—*Concluded.*

Saint John, N.B.			Halifax, N.S.			Vancouver, B.C.		
Rates per 100 lbs.	Minimum weight per carload for which rate will apply	Distance in miles to port	Rates per 100 lbs.	Minimum weight per carload for which rate will apply	Distance in miles to port	Rates per 100 lbs.	Minimum weight per carload for which rate will apply	Distance in miles to port
\$	Lbs.		\$	Lbs.		\$	Lbs.	
.58	—	214	.38	—	65	3.16	—	3,489
.66	—	273	.34	—	47	3.52½	—	3,548
.44	—	90	.54	—	189	3.12	—	3,362
.99½	—	850	.99½	—	1,173	2.80	—	2,732
.99½	—	863	.99½	—	1,199	2.80	—	2,746
1.03½	—	894	1.03½	—	1,218	2.80	—	2,776
1.06½	—	635	1.06½	—	988	2.80	—	2,733
.38	36,000	488	.38	36,000	803	1.50	30,000	2,882
.39½	36,000	810	.39½	36,000	1,134	1.50	30,000	2,697
.44	36,000	1,033	.44	36,000	1,355	1.50	30,000	2,716
1.29	30,000	1,827	1.31	30,000	1,995	1.42	40,000	1,465
.46	30,000	488	.46	30,000	803	1.70	30,000	2,882
.46	30,000	810	.46	30,000	1,134	1.70	30,000	2,697
.46	30,000	464	.46	30,000	768	1.84	30,000	2,936
.46	30,000	488	.46	30,000	803	1.75	30,000	2,882
.46	30,000	600	.46	30,000	953	1.75	30,000	2,792
.46	30,000	810	.46	30,000	1,134	1.75	30,000	2,697
.46	30,000	1,033	.46	30,000	1,201	1.75	30,000	2,804
.51½	30,000	1,186	.51½	30,000	1,354	1.75	30,000	2,970
.97	—	460	.97	—	738	2.92	—	2,975
.99½	—	589	.99½	—	910	2.80	—	2,761
.99½	—	850	.99½	—	1,173	2.80	—	2,732
1.11	—	1,110	1.11	—	1,278	2.80	—	2,894
.23	45,000	488	.23	45,000	803	.72	80,000	2,882
.24	45,000	1,046	.24	45,000	1,213	.72	80,000	2,842
.24	45,000	861	.24	45,000	1,183	.72	80,000	2,743

Reprinted from "The Canadian Trade Index."

The following table of mileage indicates surfaced and unsurfaced roads, by provinces:—

Provinces	Surfaced		Unsur- faced	Total
	Gravel	Paved		
Prince Edward Island.....	246	9	3,395	3,650
Nova Scotia.....	4,287	48	10,384	14,719
New Brunswick.....	5,039	15	6,771	11,825
Quebec.....	12,591	2,256	20,916	35,763
Ontario.....	43,067	3,826	19,518	66,411
Manitoba.....	3,643	91	24,553	28,287
Saskatchewan.....	2,113	—	153,496	155,609
Alberta.....	1,633	70	60,723	62,426
British Columbia.....	8,030	402	14,028	22,460
	80,649	6,717	313,784	401,150

### CANALS OF CANADA

The canals controlled by the Dominion Government consist firstly of five main systems, namely, the St. Lawrence and Great Lakes route, the Richelieu river system, the Ottawa river system, the Rideau canal, and the Trent canal. In addition to these are two short independent canals, the St. Peters in Cape Breton, Nova Scotia and the St. Andrews on the Red river north of Winnipeg, Manitoba. The total length of actual canal or canalized waters included in the above amounts to about 510 miles, and the number of locks in operation to 144. The waterways systems which are linked up by these canals amount in all to upwards of 1,600 miles.

Of the various canal systems by far the most important is that of the St. Lawrence and Great Lakes. This consists of a series of eight distinct canals connected by navigable stretches of river and lake waters and extends from Montreal, at the head of ocean navigation, to Sault Ste. Marie at the easterly end of lake Superior. Its total length is 946 miles, the difference in level overcome amounting to about 580 feet.

The Richelieu river canals provide a water route from Montreal to Rouse's Point, New York, at the head of lake Champlain, a distance of 127 miles. The route continues through this lake and the Hudson river to New York.

The navigation of the Ottawa river between Ste. Anne de Bellevue at the head of Lake St. Louis, and Ottawa is effected by the Ottawa river canals which overcome rapids at the junction of the Ottawa and St. Lawrence rivers and at Carillon and Long Sault.

The Rideau canal provides a waterway between the cities of Ottawa and Kingston, a distance of 126 miles. A branch of this canal extends from Beveridge's Bay on the lower Rideau lake to the town of Perth, a distance of 7.25 miles.

The Trent canal system, a linking up of various rivers and lakes, extends from Trenton on the Bay of Quinte to Port Severn on Georgian Bay. It is completed only as far as Swift Rapids from which point vessels of small draft can be carried over marine railways to Port Severn.

No tolls are charged on Canadian canals.

## CANALS OF CANADA—LENGTH AND LOCK DIMENSIONS, 1932

Name	Location	Length in miles	Locks			
			Minimum dimensions			
			Num- ber of locks	Length between hollow quoins	Mini- mum width	Normal depth over sills
				feet	feet	feet
<i>St. Lawrence and Great Lakes</i>						
Lachine.....	Montreal to Lachine.....	8.74	5	270	45	14
Soulanges.....	Cascades Point to Coteau Landing...	14.67	5	280	46	15
Cornwall.....	Cornwall to Dickinson's Landing.....	11.00	6	270	43-67	14
Farran's Point.....	Farran's Point Rapids.....	1.28	1	800	50	16
Rapide Plat.....	Rapide Plat, Morrisburg.....	3.89	2	270	45	14
Galops.....	Iroquois to Cardinal.....	7.36	3	270	45	14
Welland Ship.....	Port Weller, Lake Ontario, to Port Colborne, Lake Erie.....	27.60	8	859	80	30*
Sault Ste. Marie.....	St. Mary's Rapids, Sault Ste. Marie..	1.38	1	900	60	18-25
<i>Ottawa and Rideau Rivers</i>						
St. Anne's Lock.....	Junction of St. Lawrence and Ottawa rivers.....	0.12	1	200	45	9
Carillon.....	Carillon rapids, Ottawa river.....	0.94	2	200	45	9
Grenville.....	Long Sault rapids, Ottawa river.....	5.94	5	200	45	9.5
Rideau.....	Ottawa to Kingston.....	126.25	47	134	33	5
	Rideau Lake to Perth (Tay Branch)...	7.25	2	134	33	5
<i>Richelieu River</i>						
St. Ours Lock after 1931...	St. Ours, Que.....	0.12	1	339	45	12
Chambly.....	Chambly to St. Johns, Que.....	11.76	9	120.5	23.25	6.5†
<i>Lake Ontario to Georgian Bay</i>						
Murray.....	Isthmus of Murray, Bay of Quinte...	5.15	None	—	—	(11)‡
Trent.....	Trenton to Peterborough lock, Peter- borough.....	88.74	18	175	33	8-33
	Peterborough lock to Swift Rapids...	135.71	24	134	33	6
	Swift Rapids to Port Severn.....	16.0	1	100	25	(4)**
	Port Severn lock.....	—	1	100	25	6
	Sturgeon lake to Lindsay (Scugog Branch).....	8.35	1	142	33	6
	Lindsay to Port Perry (Scugog Branch)	26.65	None	—	—	(4.5)
<i>Miscellaneous</i>						
St. Peters.....	St. Peter Bay to Bras d'Or Lakes, Cape Breton, N.S.....	0.50	1	300	48	18§

\*The depth of canal prism between locks is 25 feet.

‡With lake Ontario at elevation 244.

§The depth of canal prism is 17 feet.

†The lock of minimum usable length on this system is No. 2 with an inside clearance of 111 feet 5 inches.

\*\*The largest motorboat which can be passed over the Marine Railways at Swift Rapids and Big Chute, Severn river, is one of 56 feet in length, 13½ feet beam, 4 feet draft and weighing not more than 15 tons.

## PORTS AND HARBOURS

Most of the main ports in Canada are administered by harbour commissions (Victoria, British Columbia, being an exception), each commission being constituted by a special act of Parliament. The commissions have jurisdiction over all Crown property in their harbour but no property may be disposed of in any way without the consent of the Governor in Council. They have powers to make by-laws for the government of harbour properties and services and for the imposition and collection of rates on vessels and cargoes and penalties for infraction of their by-laws. They also control the expenditure of revenue so received. All commissions are subject to the jurisdiction of the Minister of Marine in all matters.

Other harbours in the Dominion, when proclaimed public harbours under the Canada Shipping Act, have an officer known as Harbour Master in charge of navigation of vessels in the harbour and the assignment of berths and anchorages. He operates under the control of the Department of Marine and is paid from fees levied on vessels under the terms of the Act. Harbours administered on this principle in Canada number approximately 170.

The wharves constructed by the Dominion Government in any harbour in Canada not administered by a Harbour Commission or some other special form of administration, are administered by an officer known as a wharfinger appointed under the Government Harbours and Piers Act, who collects the tolls imposed under the regulations on vessels and cargo. This officer likewise operates under the control of the Department of Marine, and for remuneration he is allowed to retain a percentage from the revenues collected under the tariff.

### Atlantic Ports

Chief Canadian Maritime ports in the East are:—Halifax, Saint John, Sydney and Louisburg, on the Atlantic seaboard; with Quebec and Montreal on the St. Lawrence river—the former 800 miles and the latter 1,000 miles from the sea but easy of access to ocean vessels of large tonnage by means of the St. Lawrence Ship channel. Montreal is the chief port of transfer for cargo from ocean to lake carrier, the St. Lawrence canal system to the Great Lakes having its beginning at the harbour's westerly entrance.

MONTREAL is second only to New York on the North American continent as a port, despite the fact that it is closed for over four months during the year. More than 100 ocean vessels can be accommodated in the docks and there are over 8 miles of developed waterfront. It has most modern facilities for the storing and handling of grain and will in the near future have grain elevators with a capacity of 20,000,000 bushels.

The ship channel between Montreal and Quebec varies in depth from about 35 feet at high tide in the tidal portions of the river to 30 feet at ordinary low water, with a minimum width of 300 feet enlarged up to 800 feet at the bends and difficult places.

QUEBEC, approximately 180 miles distant down river from Montreal, with its outstanding bridge spanning the river some 150 feet over high water, is the other important port of the St. Lawrence. It is a port of call for the ocean lines terminating at Montreal, and the terminal for the large liners which cannot go up the ship channel. A grain elevator with a capacity of 4,000,000 bushels and berths with depths varying from 25 feet to 40 feet are available for 25 vessels.

HALIFAX harbour is open all the year round and is one of the safest of world harbours. It has space and depth of water sufficient for a large number of vessels, with extensive berthage facilities for vessels drawing from 25 to 45 feet of water.

SAINT JOHN is also a winter port open all year. The main channel has a depth of 28 feet towards the head of the harbour and the harbour itself has depths varying from 50 feet to 70 feet. The depths of water alongside the wharves at Saint John West are from 26 feet to 35 feet. The West St. John berths, destroyed by fire in June, 1931, have been rebuilt in improved construction; and a new deepwater pier and shore quay, with a 1,500,000 bushel grain elevator, will be ready for service during the latter part of 1933.



### Pacific Ports

On the Pacific coast Canada has but two large seaports, Vancouver and Victoria. Prince Rupert is a natural harbour which should gain in importance as northern British Columbia is developed and new outlets for the grain produced in the Peace River farming areas are opened.

VANCOUVER is the western terminal of the Canadian National and Canadian Pacific railways and has an elevator storage capacity of over 16,000,000 bushels. Large quantities of British Columbia timber are shipped annually and with cheaper freight rates available through the Panama Canal route to European ports, the growth of Vancouver as a port is assured. The wheat movement through Vancouver in 1917 was only 312,000 bushels but in 1924 it had increased to 53,509,000 bushels, and in 1931 was 73,000,000 bushels. The entrance to the harbour has a minimum depth of 36 feet and the wharves and piers have depths varying from 20 feet to 40 feet.

VICTORIA has berthage for ocean going ships in the outer harbour where there is a depth of from 26 feet to 33 feet. The harbour is divided into 3 parts, the outer harbour, the inner harbour, and the upper inner harbour. Depths along the wharves are about 20 feet.

### Hudson Bay Ports

CHURCHILL on Hudson Bay, and the terminus of the Hudson Bay Railway, first came into operation as a grain shipping port in 1931. The shipping facilities include a grain elevator of 2,500,000 bushels storage capacity and a dock 1,854 feet long with 30 feet depth of water at low tide. Vessels of 28 feet draft can enter and leave at all stages of the tide. The harbour is land-locked. In view of the brevity of the season the elevator and dock are equipped to minimize the time of loading. Aids to navigation in Hudson Strait protect vessels against the hazards that heretofore attended this route. This is the shortest grain shipping route from a large area in Western Canada to Europe.

### Inland Ports

The St. Lawrence system of inland waterways penetrates from the straits of Belle Isle to the head of lake Superior, a distance of 2,340 miles into the very heart of the continent, providing a waterway outlet to the Atlantic seaboard for the harvests of the prairie and the agricultural and industrial products of Ontario and Quebec. For seven and one half months in the year a channel 35 feet deep is available on the St. Lawrence for ocean steamers as far up as Montreal at the head of ocean navigation.

Between Montreal and Fort William and Port Arthur on the west shore of lake Superior the through water route comprises 76 miles of canal with 31 locks and 1,142 miles of river and lake waters, a total of 1,218 miles. The minimum depth of water on this route at normal level is 14 feet.

The principal inland ports of Canada are Toronto on lake Ontario, Sarnia on the east side of the St. Clair river, Fort William and Port Arthur on lake Superior, and Port McNicoll on Georgian bay.

TORONTO harbour has two entrances, the east one having a minimum depth of 14 feet and the west 12 feet. The greatest depths in this harbour are from 27 feet to 30 feet and the ship channel is 400 feet wide with a minimum depth of 22 feet. Central harbour terminal wharves have a depth of 24 feet which is to be increased to 30 feet.

## THE CANADIAN INDUSTRIAL FIELD

SARNIA has a depth of 21 feet alongside the numerous wharves and the depths for anchorage vary from 35 feet in the channel to 9 feet in the bay.

FORT WILLIAM has three natural channels of the harbour, with widths of 600, 500 and 400 feet, all dredged to a depth of 25 feet. The wharves have a depth of 22 feet and alongside the Empire and Northwestern elevators 25 feet.

PORT ARTHUR has a channel 350 feet wide leading into main harbour centre and a depth of 20 to 21 feet in the harbour. Main harbour south has a channel 375 feet wide and a depth of 25 feet with harbour depths of 19 feet to 25 feet, while the depths in main harbour north range from 12 feet to 24 feet.

PORT McNICOLL has an artificial basin 800 yards long and 200 yards wide with concrete docks on the east and west sides. The depth alongside is 24 feet.

The following tables show shipping at the principal ocean and inland ports for the fiscal years ending March 31, 1930-1931-1932:—

## OCEAN PORTS

Port	Year	Total shipping			
		Arrived		Departed	
		Vessels	Tons register	Vessels	Tons register
Montreal.....	1930	6,276	8,367,717	6,341	8,382,164
	1931	5,541	8,258,899	5,585	8,260,142
	1932	5,538	7,637,641	5,595	7,660,918
Quebec.....	1930	2,315	4,400,046	2,347	4,385,838
	1931	2,257	4,394,433	2,229	4,374,790
	1932	2,320	3,984,305	2,338	3,975,482
Halifax.....	1930	3,834	5,148,986	3,850	4,857,986
	1931	3,597	4,774,115	3,640	4,613,622
	1932	3,105	4,708,569	3,277	4,835,091
Saint John.....	1930	2,633	1,732,645	2,646	1,717,045
	1931	2,358	1,988,416	2,356	1,984,967
	1932	2,088	2,060,292	2,109	2,083,546
Vancouver.....	1930	17,791	11,294,207	17,925	11,245,600
	1931	16,159	12,645,982	16,278	12,300,455
	1932	14,127	11,809,539	14,197	11,924,131

## INLAND PORTS

Port	Year	Total shipping			
		Arrived		Departed	
		Vessels	Tons register	Vessels	Tons register
Port Arthur.....	1930	1,188	2,570,086	1,315	3,114,686
	1931	1,246	3,159,367	1,357	3,427,239
	1932	1,135	2,770,319	1,315	3,088,330
Fort William.....	1930	1,237	3,043,518	1,180	2,913,236
	1931	1,171	3,064,148	1,042	2,707,193
	1932	1,309	2,915,733	1,141	2,611,569
Toronto.....	1930	2,664	1,998,792	2,704	2,043,317
	1931	2,565	2,493,338	2,537	2,121,351
	1932	2,635	2,558,454	2,622	2,537,247
Sarnia.....	1930	19,237	3,934,068	19,268	3,973,789
	1931	19,407	3,855,670	19,413	3,847,203
	1932	18,071	3,376,748	18,081	3,390,934

### STEAMSHIP SERVICES

The Department of Marine administers the general shipping interests of Canada. Administration of the Canada Shipping Act, and other acts relating to marine transportation, the construction of lighthouses, ports, harbours, piers, pilotage, the meteorological service, river and harbour police, shipwreck enquiries, inspection of ships, radio telegraph stations, etc., are among the most important functions of the department.

There are, on the Atlantic, 49 lines operating steamship services from Montreal, 15 from Quebec, 52 from Halifax, and 26 from Saint John, and, on the Pacific, 69 lines from Vancouver—in all, over 200 different services.

Among the largest companies are the Canadian Pacific Steamships and the Canadian National Steamships. The Canada Steamship Lines operate extensive services on the Great Lakes, the St. Lawrence and other inland waterways. Other principal steamship companies are the Anchor-Donaldson Line, Cunard Line, Houston Line, White Star Dominion Line, Blue Funnel Line, Ellerman-Bucknall Line, Manchester Line, Elder Dempster Line, Canadian-Australian Line, County Line, Cairn Line, Furness Line, Pickford and Black Line, Lloyd-Mediterraneo Line, Scandinavian-American Line, and Holland-America Line.

Passenger and freight services are maintained to European, United States, West Indian, South American, South African, and Australian ports from the Atlantic seaboard and to China, Japan, Mexico, Australia, New Zealand, South Africa, Central and South America, and the Orient generally from the Pacific seaboard, as well as to Atlantic seaboard, Great Britain, and European ports via the Panama canal.

### AIR ROUTES AND SERVICES

Civil aviation in Canada dates from the end of the Great War though public attention was first directed to aeronautic activity in the Dominion by the first recorded flight at Petawawa in 1909. Aeronautics is no longer an experiment but a business. Developments during the past few years have demonstrated its utility. A review of the progress made in Canada during the post-war years cannot fail to strengthen the public attitude towards air commerce and to the appreciation of its unlimited possibilities as a benefit to the State.

Canada, geographically, is a country of great distances. Her cities are separated by vast stretches, and railroads, highways, and canals have, until recent years, been the most important means of transportation. The influence of aviation on such a vast country as a rapid and more direct form of transport has produced a great awakening of interest and enthusiasm probably equalled in no other field of activity.

The Aeronautics Act providing for the administration of aeronautics in Canada became law on the 6th of June, 1919, but it was not till 1927 that the present era of intensive development commenced. Enactments of air regulations to protect the public and increase the efficiency and safety of air routes, aerodromes, lighting systems, radio direction finding stations, and meteorological services have been provided, indicating a permanent and continual advance in aeronautical science.

Commercial aviation has made rapid progress, and probably in no other country in the world is there a wider and more varied field where it can be proved beyond question that flying can be used to greater advantage than in Canada.

The activities of commercial concerns, and both provincial and federal government services in aeroplane transportation in the remoter parts of the country are now generally accepted as a necessity and have become a recognized part of every conservation development, and engineering service in the country. The handicaps of winter flying have now been largely overcome and all year round operations of long and difficult flights are undertaken with scheduled regularity.

During 1926, 14 firms were operating aircraft in Canada but by the end of 1931 the total had increased to 100 in addition to 66 registered private owners. A notable advance was also observed for the number of hours flown by aircraft which increased during the five year period from 5,860 hours in 1926 to 73,645 in 1931. A corresponding increase in number of passengers carried during the same period occurred, the total of 6,436 persons carried in 1926 being increased to 100,128 during 1931.

The following statistics indicate the extent of civil flying during 1931:—

Operating firms, 100; hours flown, 73,645; passengers carried, 100,128; passenger miles, 4,073,553; freight carried (pounds), 2,372,467; mail (pounds), 470,461; licensed airharbours, 83; licensed aircraft, 495; licensed pilots (commercial), 366; licensed pilots (private), 292; licensed air engineers, 346.

The chief outlet for commercial flying, other than government contracts, has been the transportation of men and supplies to the northern mining camps. Journeys which formerly occupied weeks of labourious travel are now undertaken in a few hours time, and with greater economy in most instances.

The development of air mail services to connect the principal cities of the Dominion and to serve the needs of isolated communities is now established. During the winter of 1927-28 the Post Office Department let contracts for 5 mail services serving points in the lower St. Lawrence and Magdalen Islands, Pelee Island, and Red Lake districts.

Air mail services maintained on schedule during 1931 were:—

Name of route	Contractors	Duration of service	Frequency of service	Flying distance miles
Montreal-Rimouski.....	R.C.A.F.....	During open season of navigation (30 weeks).	2 trips per week out-going. 1 incoming.	330
Montreal-Albany.....	Canadian Colonial Airways, Ltd., Montreal.	All the year round.....	6 trips per week, one way.	200
Quebec, P.Q. - Seven Is. via Betsiamites, Chute aux Outardes, Franquelin, Baie St. Nicholas, Godbout, Baie de la Trinité, Pentecost Riv., Shelter Bay, Clark City.	Canadian Airways, Ltd....	During closed season of navigation (approx. 15th Dec. to 15th April).	2 round trips per week.	350
Seven Is., P.Q.-Anticosti....	Canadian Airways, Ltd....	During closed season of navigation (approx. 15th Dec. to 15th April).	2 round trips per month.	120
Amos-Siscoe-Pascalis, P.Q....	General Airways Ltd.....	All the year round.....	15th May to 15th November, tri-weekly. 16th November to 15th December, weekly. 16th December to 15th April, semi-weekly. 16th April to 14th May, weekly.	57



Name of route	Contractors	Duration of service	Frequency of service	Flying distance miles
Moncton, N.B.-Magdalen I.	Canadian Airways Limited.	During closed season of navigation (approx. 15th December to 15th April).	One round trip per week.	20
Moncton to Charlottetown, P.E.I.	Canadian Airways, Limited.	" "	Weekly.....	110
Leamington, Ont.-Pelee I., Ont.	Nat. Air. Trans., Limited.	" "	Daily, except Sunday.	22
Sioux Lookout-Red Lake, Ont.	Canadian Airways, Limited.	All the year round.....	Semi-weekly.....	325
McMurray, Alta.-Aklavik, N.W.T., via Chipewyan, Fitzgerald, Fort Smith, Resolution, Hay River, Providence, Simpson, Wrigley, Norman, Good Hope, Arctic Red River, Macpherson, Aklavik.	Canadian Airways, Limited.	All the year round.....	Weekly.....	1,676
Resolution-Great Bear Lake, N.W.T.	Canadian Airways, Limited.	All the year round.....	Monthly.....	360
Winnipeg-Pembina, Manitoba	" "	" "	Daily.....	66
Prince Albert-Lac la Ronge, Saskatchewan.	Brooks Airways, Limited..	" "	Weekly.....	140
Peace River-North Vermilion.	Canadian Airways, Limited.	" "	16 return trips during winter.	167
Vancouver-Victoria, B.C.....	" "	Summer service.....	Daily.....	60
Whitehorse-Dawson, Yukon..	Treadwell Yukon Company.	Special (sticker) service.	.....	273

The above services are operated by commercial aviation companies under contract with the Post Office Department, and are the initial steps in the establishment of a great system of airways which will in time connect all parts of the Dominion.

St. Hubert airport at Montreal is the terminal of the first international passenger freight and mail route between the United States and Canada, and the traffic returns of international business already indicate this airport being one of the most important on the continent.

During 1931 the total aircraft operating to and from St. Hubert airport was 1,070, and revenue obtained from storage, etc., amounted to \$13,060. In the same year 4 aircraft were imported, the value of aircraft and parts imported being \$24,098.

#### *Licensed Civil Aerodromes, Public Airports*

Brandon, Manitoba.	London, Ontario.	Sydney, Nova Scotia.
Brantford, Ontario.	Medicine Hat, Alberta.	Toronto, Ontario (De Lesseps).
Calgary, Alberta.	Moncton, New Brunswick.	Toronto, Ontario (Barker Field).
Cap de la Madeleine, Quebec.	Montreal, Quebec (La Salle).	Toronto, Ontario (Aerodrome Ltd.)
Cranbrook, British Columbia.	Montreal, Quebec (St. Hubert)	Trail, British Columbia.
Edmonton, Alberta.	Montreal, Quebec (Cartierville).	Vancouver, British Columbia.
Fernie, British Columbia.	Moose Jaw, Saskatchewan.	Vernon, British Columbia.
Fort William, Ontario.	Ottawa, Ontario.	Virden, Manitoba.
Grand Forks, British Columbia.	Regina, Saskatchewan.	Walkerville, Ontario.
Halifax, Nova Scotia.	Rimouski, Quebec.	Winnipeg, Manitoba (Stevenson).
Hamilton, Ontario.	Saskatoon, Saskatchewan.	
Kenora, Ontario.	St. Catharines, Ontario.	
Kitchener, Ontario.	Stratford, Ontario.	

#### *Public Airports Licensed for Customs*

Lethbridge, Alberta.	Moose Jaw, Saskatchewan.	Walkerville, Ontario.
Montreal, Quebec (St. Hubert)	Regina, Saskatchewan.	

*Auxiliary Aerodrome*

Digby, N.S.

*Private Airports*

Belleville, Ontario.  
 Chatham, Ontario.  
 Kingston, Ontario.  
 Lac à la Tortue, Quebec.  
 Longueuil, Quebec.

Niagara Falls, Ontario.  
 Quebec, Quebec.  
 Regina, Saskatchewan.  
 St. Jovite, Quebec.

Toronto, Ontario.  
 Victoria, British Columbia.  
 Winnipeg, Manitoba.  
 Woodstock, Ontario.

*Private Seaplane Ports*

Lac à la Tortue, Quebec.  
 Montreal, Quebec.

Quebec, Quebec (Sillery).

Sioux Lookout, Ontario.

*Public Seaplane Ports*

Fredericton, New Brunswick.  
 Lake Waskesiu, Saskatchewan.  
 Longueuil, Quebec.  
 Matapedia Lake, Quebec.  
 Montreal, Quebec.

St. Félicien, Quebec.  
 Saint John, New Brunswick.  
 Sioux Lookout, Ontario.  
 Swanson Bay, British  
 Columbia.

Temiscouata, Quebec.  
 Toronto, Ontario.  
 Vancouver, British Columbia.  
 Winnipeg, Manitoba.

*Public Seaplane Anchorages*

Emma Lake, Saskatchewan.  
 Fredericton, New Brunswick.  
 Haileybury, Ontario.

Montreal, Quebec (Pointe aux  
 Trembles).  
 Port Arthur, Ontario.

Sproat Lake, British Columbia  
 Three Rivers, Quebec.  
 Williams Lake, British Colum-  
 bia.

*Public Seaplane Anchorages—Also Licensed for Customs*

Fredericton, New Brunswick.

Haileybury, Ontario.

*Private Seaplane Anchorages*

Como, Ontario.  
 Fort Francis, Ontario.  
 Minaki, Ontario.  
 Oba Lake, Ontario.

Orient Bay, Ontario.  
 Remi Lake, Ontario.  
 Roberval, Quebec.  
 Sault Ste. Marie, Ontario.

Sioux Lookout, Ontario.  
 Sudbury, Ontario.  
 Timagami, Ontario.

## CHAPTER VI

### LABOUR, AND IMMIGRATION REGULATIONS AFFECTING LABOUR IN CANADA

#### WAGES AND HOURS OF LABOUR

The Department of Labour of the Dominion Government publishes from time to time bulletins on wages and hours of labour in Canada. The following information is compiled from a bulletin issued as a supplement to the Labour Gazette for January, 1933, giving figures as to 1932 and certain previous years.

The table of index numbers below will show the general trend of the movement in rates of wages from 1911 to 1932 for several groups of trades or industries. An average of the first six groups is made in order to indicate the general trend in such trades. The year 1913 was taken as the base period, that is the wage rates in 1913 were taken as 100, so that the index numbers show the percentage changes in rates from time to time prior to and since that date.

It will be seen that by 1920 wages had generally reached levels almost one hundred per cent higher than in 1913. Since 1920 all groups have shown some decreases, but recovered somewhat by 1929 and 1930, declining to some extent in 1931 and 1932.

#### INDEX NUMBERS OF RATES OF WAGES FOR VARIOUS CLASSES OF LABOUR IN CANADA, 1901-1932

(Rates in 1913=100)

Year	Build- ing trades	Metal trades	Print- ing trades	Electric rail- ways	Steam rail- ways	Coal mining	*Aver- age	Com- mon factory labour	Miscel- laneous factory trades	Logging and saw- milling
1911.....	90.2	91.0	91.6	88.1	95.7	97.5	92.4	94.9	95.4	96.3
1912.....	96.0	95.3	96.0	92.3	97.9	98.3	96.0	98.1	97.1	98.8
1913.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1914.....	100.8	100.5	102.4	101.0	101.4	101.9	101.3	101.0	103.2	94.7
1915.....	101.5	101.5	103.6	97.8	101.7	102.3	101.4	101.0	106.2	89.1
1916.....	102.4	106.9	105.8	102.2	105.9	111.7	105.8	110.4	115.1	109.5
1917.....	109.9	128.0	111.3	114.6	124.6	130.8	119.9	129.2	128.0	130.2
1918.....	125.9	155.2	123.7	142.9	158.0	157.8	143.9	152.3	146.8	150.5
1919.....	148.2	180.1	145.9	163.2	183.9	170.5	165.3	180.2	180.2	169.8
1920.....	180.9	209.4	184.0	194.2	221.0	197.7	197.9	215.3	216.8	202.7
1921.....	170.5	186.8	193.3	192.1	195.9	208.3	191.2	190.6	202.0	152.6
1922.....	162.5	173.7	192.3	184.4	184.4	197.8	182.5	183.0	189.1	158.7
1923.....	166.4	174.0	188.9	186.2	186.4	197.8	183.3	181.7	196.1	170.4
1924.....	169.7	175.5	191.9	186.4	186.4	192.4	183.7	183.2	197.6	183.1
1925.....	170.4	175.4	192.8	187.8	186.4	167.6	180.1	186.3	195.3	178.7
1926.....	172.1	177.4	193.3	188.4	186.4	167.4	180.8	187.3	196.7	180.8
1927.....	179.3	178.1	195.0	189.9	198.4	167.9	184.8	187.7	199.4	182.8
1928.....	185.6	180.1	198.3	194.1	198.4	168.9	187.4	187.1	200.9	184.3
1929.....	197.5	184.6	202.3	198.6	204.3	168.9	192.7	187.8	202.1	185.6
1930.....	203.2	186.6	203.3	199.4	204.3	169.4	194.4	188.2	202.3	183.9
1931.....	195.7	182.9	205.1	192.4	199.2	169.4	190.8	183.4	197.3	163.0
1932.....	178.2	174.7	194.2	180.7	183.9	164.0	179.3	173.6	184.3	141.3

\*Simple average of six preceding columns.

In the following table will be found the rates of wages and hours of labour in various trades in four chief cities of Canada in 1932, namely, Montreal, Toronto, Winnipeg, and Vancouver:—

RATES OF WAGES AND HOURS OF LABOUR IN VARIOUS TRADES, IN CERTAIN CITIES OF CANADA, 1932

Occupation	Montreal		Toronto		Winnipeg		Vancouver	
	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week
	\$		\$		\$		\$	
<b>1. BUILDING TRADES—</b>								
Bricklayers.....	.75-.85	44	1.00	40	1.35	44	1.22½	40
Carpenters.....	.60-.75	44-55	.90	40	1.00	44	.87½	40-44
Electrical workers.....	.75	44	1.00	40	1.00	44	1.00	44
Painters.....	.65	44-49½	.75-.82½	44	.70-.80	44	.75	44
Plasterers.....	.85	44-49½	1.00	40	1.35	44	1.00-1.25	40
Plumbers.....	.75	44	1.00	40	1.15	44	1.00	40
Sheet metal workers.....	.65	44	.90	40	.85	44	1.00	40-44
Stonemasons.....	.75-1.00	44	1.00	40	1.15	44	1.25	40
Labourers.....	.30-.40	44-60	.30-.50	40-48	.40-.50	44-60	.40-.50	40-44
<b>2. METAL TRADES—</b>								
Blacksmiths.....	.60-.75	40-50	.60-.80	40-50	.60-.70	44-50	.65-.75	44
Boilermakers.....	.55-.65	44	.60-.75	40-50	.58-.71	44-50	.67½-.78½	44
Machinists.....	.50-.85	44-50	.52½-.75	40-50	.55-.75	44-50	.67½-.87½	44
Iron moulders.....	.50-.71	44-50	.52½-.80	40-50	.60-.75	44-50	.67½-.80	44
<b>3. ELECTRIC RAILWAYS—</b>								
Conductors and motormen.....	.55	40	.60	40-48	.58	42	.63	48
Linemen.....	.51-.55	40	.72-.78	36	.86	44	.69-.97	32
Shop and barnmen.....	.38-.62	45-62	.54-.81	33	.40-.70	39-44	.46-.75	44-48
Electricians.....	.55-.65	40-45	.60-.79	32-33	.57-.70	39-42	.70-.75	44
Trackmen and labourers.....	.35	48	.50-.59	32	.40½	44	.50-.59	44-48
<b>4. PRINTING TRADES—</b>								
Compositors, machine and hand, news.....	38.00-44.00	48	47.50	46½	43.00	46	43.20	45
Compositors, machine and hand, job.....	32.00-38.00	44-48	35.00-40.00	44-48	39.60	44-48	40.50	44-48
Pressmen, news.....	35.00-40.00	48	46.50	48	42.00	48	43.20	48
Pressmen, job.....	32.00-36.00	44-48	33.00-40.00	44-48	39.60	44-48	40.50	44-48
Bookbinders.....	30.00-33.75	48	33.00-38.00	44-48	35.00-39.00	44-48	38.56-40.50	44-48
Bindery girls.....	12.50-15.00	48	15.00-18.00	44-48	10.00-18.00	44-48	16.00-20.25	44-48

Space does not permit publishing the details of wage rates and hours of labour of the manufacturing industries in Canada; these are given in the bulletin mentioned above which may be obtained from the Department of Labour, Ottawa. In 1930 there were 24,020 manufacturing establishments giving employment to 551,496 wage earners, who were paid \$551,853,649, an average of \$1,000 per worker. The number of salaried employees was 92,495, receiving \$184,239,117, an average of \$1,982. Data as to numbers of establishments, value of output, raw materials, employees, salaries and wages in each industry for 1930 appear in the Canada Year Book, published by the Dominion Bureau of Statistics, Ottawa.

The following paragraphs afford information as to prevailing hours of labour and general wage levels in certain manufacturing industries. Many of the establishments have been on the eight hour day with five days, or less, per week on a short time basis.

TEXTILES, COTTON, WOOLLEN, and KNITTING.—Most of the factories operate 50 or 55 hours per week when on full time with wages per hour as follows: carders (male) 25 cents to 40 cents; spinners (male) 25 cents to 45 cents; spinners



(female) 20 cents to 35 cents; weavers (male and female) 20 cents to 44 cents; loomfixers (male) 42 cents to 50 cents; knitters (male) 30 cents to 90 cents; knitters (female) 20 cents to 50 cents.

**SHIRTS.**—Hours of labour are chiefly 44 to 50 per week and wages per week as follows: cutters \$22 to \$38; machine operators (female) \$10 to \$15; pressers (female) \$12 to \$15; examiners (female) \$8 to \$15.

**READY-MADE CLOTHING: MEN'S AND WOMEN'S.**—Most establishments are on the 44 hour week with wages per week as follows: cutters \$30 to \$38 with some lower; machine operators (male) \$20 to \$36; machine operators (female) \$10 to \$16; basters (male) \$10 to \$35; pocket makers \$11 to \$42.

**BOOTS AND SHOES, LEATHER.**—Standard hours of labour per week are from 44 to 55 with wages per hour as follows: cutters 35 cents to 65 cents; lasters 45 cents to 60 cents; stitchers 20 cents to 45 cents; machine operators 20 cents to 40 cents.

**RUBBER.**—Standard hours per week are from 44 to 55, with wages per hour as follows: compounders 35 cents to 60 cents; curers 45 cents to 70 cents; calendar men 40 cents to 65 cents; tire builders 50 cents to 70 cents; shoemakers (male) 25 cents to 45 cents and shoemakers (female) from 22 cents to 30 cents; cutters from 25 cents to 55 cents; quarter makers (female) from 20 cents to 28 cents.

### LABOUR LEGISLATION

Under the Canadian constitution, matters affecting factories, mines, shops and employment conditions generally come within provincial jurisdiction, while matters relating to employment in undertakings carried on in connection with Dominion public works, transportation and communication services come within federal jurisdiction. Immigration is also a matter for Dominion regulation.

In certain classes of legislation which are within provincial jurisdiction, the Dominion Parliament has co-operated with the provinces in order to render a more effective service.

### Dominion Labour Legislation

Under this division of legislative authority, the Fair Wages and Eight-Hour Day Act relating to Dominion public works, the Canada Shipping Act and the Railway Act regulate working conditions in certain respects for the classes of labour indicated.

The Industrial Disputes Investigation Act requires investigation of disputes between employers and employees engaged in the operation of mines and public utilities before a strike or lock-out may take place. Provincial legislation puts this Act in force in connection with such of these undertakings as are under provincial jurisdiction. In industries other than mines or public utilities, an investigation may take place with the consent of parties to the dispute.

Under the Employment Offices Co-ordination Act, public employment offices set up and administered by the different provincial governments in some seventy towns and cities are linked up in a Dominion-wide system which gives free service to employers wanting labour and to men wanting jobs.

### Provincial Labour Legislation

A brief summary of the chief provincial labour statutes follows:—

**MINING LAWS** provide for inspector of mines to ensure the health and safety of employees, prohibit employment of young persons below a fixed age, varying from 15 in Quebec and British Columbia to 17 in Alberta and Ontario, and establish maximum hours of labour for underground workers. In Alberta, British Columbia, Nova Scotia and Northern Ontario the hours underground are limited to eight a day. In Saskatchewan the same restriction is made but longer hours may be worked if the employer and employee agree. The eight-hour limit applies also in British Columbia and Saskatchewan to workers above ground.

There is **FACTORY LEGISLATION** in all the provinces but the rural province of Prince Edward Island. All the factory laws but that of New Brunswick fix a minimum age for employment in factories of at least 14 years. In Nova Scotia, Quebec, and Ontario, 14 is the minimum age except during the fruit and vegetable canning season in Nova Scotia. In Ontario, no child under 16 may be employed during school hours without a permit; in Quebec no child under 16 may be employed unless he can read and write fluently or is attending night school. In Manitoba and Saskatchewan, the minimum ages for factory employment are 14 for boys and 15 for girls; in Alberta and British Columbia 15 for both boys and girls.

Hours of labour for young persons and women in factories are restricted by law in New Brunswick and Ontario to 10 hours a day and 60 a week, in Quebec to 10 hours a day and 55 hours a week, in Manitoba to 9 hours a day and 54 hours a week and in Saskatchewan to 48 hours a week. Exemptions from these hours may be granted by the factory inspector for not more than 36 days in a year. In many cases, particularly in Ontario, hours are shorter than the statutory limit. In Alberta the hours of all factory employees are limited by law to nine a day and 54 a week, and in British Columbia to eight a day and 48 a week. Exemptions for certain classes are permitted for limited periods. Night work is prohibited for women and young persons in all the provinces but Alberta.

All the factory laws require the premises to be kept so that the health and safety of employees is assured and regulations are laid down for guarding machinery and dangerous processes.

In British Columbia, the **HOURS OF WORK ACT** provides for an 8-hour day for all workers in industrial undertakings with limited exceptions. There is also a **MALE MINIMUM WAGE ACT** in British Columbia under which minimum wages may be fixed but up to the present time rates have been established only for stationary engineers.

**MINIMUM WAGE LAWS** for the protection of female employees are in force in all provinces except New Brunswick and Prince Edward Island. In the former, a statute passed in 1930, has not been put in effect. Under these Acts a provincial board fixes minimum rates of wages for female employees in industrial and commercial establishments. In Ontario and Quebec, the hours for which the rates are to be paid are specified and rates may be fixed for hours in excess of these. In the other provinces, the board may limit the hours of employment. The Manitoba Act applies to boys under 18 as well as to girls and women, while in Alberta, no male person may be employed at a lower wage than the minimum rate for females in the same occupation. In Alberta, Saskatchewan and Nova Scotia, the orders apply only in cities and towns. In Manitoba orders

governing factories and retail shops apply throughout the province but other orders relate only to Winnipeg and vicinity. The minimum weekly rate for experienced women working in factories has been set at \$12.50 in Alberta, \$14 in British Columbia, \$11-\$12 in Manitoba according to the class of factory, \$10-\$11 in Nova Scotia, \$10-\$12.50 in Ontario, \$8-\$12.50 in Quebec and \$14 in Saskatchewan. Lower rates are fixed for minors and inexperienced workers. Rates in establishments other than factories are slightly higher or lower according to the occupation.

WORKMEN'S COMPENSATION ACTS in all provinces except Prince Edward Island establish a collective liability system of workmen's compensation which is administered by a provincial board, and which covers practically all employment except that of agriculture and domestic service. Accidents occurring in the course of employment and certain specified industrial diseases are compensatable. Assessments are levied on employers grouped in classes according to the hazard of the industry, compensation being payable from the funds of the class in which the accident occurs. In certain large industries, the employers may be individually liable.

The text of Dominion and Provincial labour laws is given in the *Report on Labour Legislation in Canada* as existing December 31, 1928, and annual supplements published by the Dominion Department of Labour, Ottawa.

#### IMMIGRATION REGULATIONS AFFECTING LABOUR

Immigration regulations are made or changed from time to time by Order in Council and any person interested in knowing what the regulations are at any given period may secure that information from the Department of Immigration and Colonization, Ottawa, and from the Director of European Emigration for Canada, Canadian Building, Trafalgar Square, London, S.W. 1, England.

The immigration regulations as of January, 1933, suspend all general immigration except from the British Isles, self-governing British Dominions, Newfoundland, and the United States of America. From the continent of Europe, whence many immigrants have come to Canada, the only classes at present admissible are:—

- (a) Wives and unmarried children under eighteen years of age joining family heads established in Canada.
- (b) Agriculturists having sufficient funds to establish and maintain themselves on the land.

From the British Isles, self-governing British Dominions, Newfoundland, and the United States, immigrants, not belonging to a prohibited class, are admissible if in possession of sufficient means to maintain themselves until employment is secured. Owing to existing unemployment conditions prevailing in Canada in common with other countries, solicitation of immigration has ceased, and a careful check is being made to see that those applying for admission are in possession of means to look after themselves while seeking work.

The present policy with regard to encouragement is indicated in the following circular issued by the Department in January, 1931:—

"Instead of naming a minimum sum, the possession of which might be regarded as warranting encouragement to migrate at this time, the Department believes that the interests of intending immigrants and of Canada will be better served by Booking Agents explaining that workers are not at present in demand

anywhere in Canada, and that encouragement should be deferred until a demand arises; any other policy is liable to displace those now employed, or to prevent the absorption of our present surplus. Even workers with moderate capital would do well to defer sailing until conditions improve."

On the 7th August, 1929, a regulation (P.C. 1413) known as the "Contract Labour Order" came into force. This regulation excludes all forms of contract labour, and the term "contract labour" as used in the Order is defined as meaning and including any immigrant seeking entry to Canada under contract or agreement, express or implied, to perform labour or service of any kind in Canada. The regulation contains a provision that the Minister of Immigration and Colonization may admit any contract labourer if satisfied that his labour or service is required in Canada. Firms having branches in Canada sometimes find themselves in difficulties as the result of transferring workmen from parent plants to branch plants in Canada without first securing approval from the Department. Such difficulties can be avoided by submitting an application to the Department of Immigration and Colonization at Ottawa, before any movement of labour takes place.















